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DETROIT

INSIDE DOPE

by GEORGE F. TAUBENECK

Story of the Week
Grounds for Pessimism
Selling Is Patriotic
Too Proud to Sell? Not Us!
British Experiment
Return, Sweet Chaos

Story of the Week

Spying a forlorn fellow twiddling his thumbs in a corner during a charity *musicale,* the hostess stopped to do her duty.

"Don't you enjoy music?" she asked.

"Sometimes."

"Ah, do you play a musical instrument yourself?"

"Not away from home."

"Oh," beamed the hostess, in hot pursuit of a conversational opening, "what do you play at home?"

"Second fiddle."

Grounds for Pessimism

In our May 26 issue this column predicted a long period of prosperity for American business—and *particularly for this* industry. To support the argument, 10 favorable factors were cited and briefed.

Two *unfavorable* omens, however, weren't mentioned. Frankly, these two handicaps worry the more thoughtful of our nation's leading business men more than they are willing to admit in public.

No matter how optimistic they feel after surveying the world's pent-up demands, the promise of technological progress, the elevation of buying power, etc., many of the executives we know have their fingers crossed about the following two psychological problems. Either or both mass-trends, unless they are reversed, may prevent us from enjoying the great period of prosperity which ought to be in store for us.

The two obstacles:

(1) *Loafing on the job.* The moral obligation to put in an honest day's work for a day's pay seems to have evaporated. "More pay for less work" is the slogan now. Even when hourly rates for labor are increased, in all too many plants the "slow-down" psychology prevails. We've harped so much on this fact in recent months that it seems unnecessary to belabor the point now.

(2) *Being afraid to sell.* For years the nation's manufacturers, wholesalers, and retailers have been hiding from customers. The war caused shortages of everything but money, and the pressure from people who needed and wanted things (remember the cigarette, meat, and nylon lines?) became so insufferable that anybody who used to have anything for sale did his best to keep out of sight.

Clerks, dealers, and even manufacturers finally got to the place where they had to insult old customers to get them out of their hair.

Nor has the postwar period been much different—up to now. Even though buyer pressure has diminished, old-fashioned salesmanship has been unnecessary and unfashionable.

As a matter of fact *selling,* as a practice and a profession, not only has gone out of style, but is actually considered in some circles to be a bit *uncouth*—below the dignity of most people in this weird New Era.

Selling Is Patriotic

Even more than labor slow-downs, this afraid-to-sell psychological twist worries the men who manage our business enterprises, and who look ahead to the future.

Without selling there can be no production, jobs, income, or prosperity. When our factories are roll-

(Concluded on Page 10, Column 3)

Steel 'Gray Market' Puzzle To Senators as More Firms Testify

WASHINGTON, D. C.—How sellers of scarce steel happened to have the metal and why they sold it at sky-high prices was on the record as witnesses continued to reveal "gray" market deals for a Senate subcommittee.

The subcommittee is one of several groups trying to find out why small manufacturers have been unable to buy steel at reasonable prices. Among others are the Federal Trade Commission and the Pressed Metal Institute.

One of the sellers, Hubert J. Kutz, president of the St. Louis Boiler and Equipment Co., told the subcommittee there is no profit in locating and buying steel. He said his company was in the business as an accomodation to prospective customers.

"There are so many persons in the 'Daisy chain' that some times I was lucky to make a profit of $10 a ton and, in many cases, I lost money after paying commissions," he testified.

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Add Freezer Space To Gibson Models

GREENVILLE, Mich.—Three 7-cu. ft. models of Gibson's Freez'r Shelf refrigerators have been revised to feature enlarged frozen food storage compartments, John L. Stephens, sales promotion manager for the Gibson Refrigerator Co. here, announced recently.

The Freez'r Lockers, as the storage compartments are called, now hold nearly 40 lbs. of frozen foods, he said.

The models and their average retail prices (Gibson uses the zone system in pricing) are as follows:

No. SF-797—$322.75; No. F-787—$274; No. F-777—$234.

In the first two models mentioned, the Freez'r Locker has 1.12 cu. ft. capacity and will hold 39.2 lbs. of frozen foods, according to Mr. Stephens. The freezer storage compartment in the last named has 1.05 cu. ft. capacity and will hold 36.9 lbs.

All models provide wall to wall storage, which is said to have been a Gibson feature for 12 years. Freez-

(Concluded on Page 17, Column 1)

Chicago Housewares Show Is Cancelled

CHICAGO — Cancellation of the housewares show scheduled to be held at the Navy Pier here from July 13 to 18 has been announced by Ted Bauerle, president of Chicago Housewares Markets, sponsor of the show.

(The proposed Housewares Show should not be confused with the Summer Homefurnishings Market, which will be held July 7-19 at the American Furniture Mart and Merchandise Mart.)

Mr. Bauerle cited as reasons for cancellation the feeling of many manufacturers that the housewares industry is "showed out" at the present time and the current hand to mouth basis of retail buying which would reduce buying activity at the show.

Plans for future shows will be held in abeyance "until such time as conditions permit sound planning," Mr. Bauerle indicated.

'Thor Corp.' New Name For Washer Producer

CHICAGO—Adoption of the name Thor Corp. to replace the old title, Electric Household Utilities Corp. was approved recently by stockholders of the firm.

New Condensing Unit Standards Postponed

WASHINGTON, D. C. — Effective date of the new standards for commercial condensing units has been postponed until Sept. 1.

Officially titled Commercial Standard CS107-45, this was originally scheduled to go into effect May 20 this year, but it has been postponed at the request of the Air Conditioning & Refrigeration Machinery Association, announces F. E. Powell of the Division of Trade Standards in the Commerce Department's National Bureau of Standards.

ACRMA and the Refrigeration Equipment Manufacturers Association appointed an engineering committee at a joint meeting in Cleveland recently to "review and make

(Concluded on Page 28, Column 2)

Kelvinator Topped 1946 Magazine Advertising Lists

DETROIT—Kelvinator division of Nash-Kelvinator Corp. was far out in front of all other household refrigerator manufacturers in expenditures for magazine advertising in 1946, according to figures compiled in a recent survey.

A total of $433,024 was spent by Kelvinator in national magazines, with the next highest expenditure being made by Hotpoint Inc., with a total of $168,160.

In magazine advertising on home freezers Deepfreeze Division of Motor Products Corp. was the leader, with Tyler Fixture Corp. next.

(Tabulation of the expenditures by companies and by magazines will be found for household refrigerator firms on page 28, and for home freezer firms on page 25.)

Westinghouse Shows 2-Temp Refrigerator

MANSFIELD, Ohio—Westinghouse dealers are now displaying the company's new two-temperature refrigerator, model MF-7-47, a 7-cu. ft. unit having 1.6 cu. ft. for frozen food storage and freezing, plus 5.4 cu. ft. of normal temperature space. It lists for $289.95.

Frozen food storage capacity is said to be 56 lbs. The top "freeze chest" itself will hold 43 lbs. of frozen food, and directly below this is a full width ice storage tray which will hold another 13 lbs.

Top chest is refrigerated on top, bottom, sides, and back. Through a baffle arrangement, the top chest supplies refrigeration for the lower, high temperature compartment.

A seven-position temperature selector is located in the center of the top breaker strip. At the "coldest" position it provides for continuous operation of the unit if rapid freezing is required.

At the rear of the baffle between the freezer section and the normal temperature section there is a damper which is automatically regulated to increase or decrease the cold air flow from the freeze chest to the

(Concluded on Page 16, Column 4)

No Code In 50 Large Cities, Survey Shows

CLEVELAND—Most cities of the United States have no refrigeration safety code; and most of the codes in existence are antiquated, according to a survey made by the National Association of Refrigeration Contractors.

NARC was endeavoring to find out two things: first, information about safety codes, and second, to what extent licensing of refrigeration contractors is required.

A letter, and later a follow-up letter, were sent to 132 city clerks; 115, or 87% replied. That, in any direct-mail expert's opinion, is a remarkable return.

Ninety-two of the cities had populations from 100,000 up. Replies were received from 79 of these.

Forty cities had populations from 35,000 to 100,000; and replies were received from 36 of these. (90%).

Of the 79 larger cities, 29 or 37% have some kind of a refrigeration safety code. It is reasonable to assume that the cities not replying have no codes, so it is reasonably safe to say that two-thirds of the large cities of our country do not have a refrigeration safety code.

Of the 36 smaller cities from which replies were received, 4 or 11% have codes. This leads to the logical and safe assumption that 90% of the smaller cities do not have safety codes, stated NARC officials.

"Some natural questions at once arise," says G. W. Weston, executive vice president of NARC. "With refrigeration equipment involving both a personal and a property hazard, why does such a condition exist?

"Economic conditions are fast bringing back a buyers' market with keener competition. With no safety standards, temptation can easily enter to skimp a job, or take what might be considered a small chance. Every industry has its men willing to work on the fringe of safety.

"Obviously, a safety code is an all-industry matter. NARC is only one branch of the industry, so all it can do is point out some of the facts found in this survey.

"The electrical industry, also with a personal and property hazard, has had its National Electrical Code, referred to as the bible of the industry for a good many years. It is in use, directly or indirectly, in hundreds of cities, and is revised rather often, to keep it in line with industry progress.

"Many of these cities automatically adopt each revision of the National Electrical Code by the following wording:

" 'Where no specific standards are prescribed by this ordinance or by the statutes of the State of ..... or by any orders, rules, or regulations issued by authority thereof, conformity with the regulations set forth in the National Electrical Code, as approved by the American Standards Association, and the electrical provisions of other safety codes approved by the American Standards Association, shall be prima facie evidence of conformity with approved standards for safety to persons and property."

"Couldn't the refrigeration industry have some similar arrangement? There is, of course, the ASA-B9 code —the American Standard Safety Code for Mechanical Refrigeration, approved by the American Standards Association and sponsored by the American Society of Refrigerating Engineers. The last and latest version of this is dated April 20, 1939, which makes it eight years old. Because of the rapid advancements in the industry, there is an urgent need for a thorough revision of this code."

NARC's check showed that a few cities are using the B-9 code; a few others, a modification of it. St.

(Concluded on Page 9, Column 1)

Some For, Others 'Agin' It

Appliance Maker Is 'All Out' for Fair Trade While a Dealer Asks Repeal of N.Y. Law

(There are widely divergent views in the field of distribution on the merits of Fair Trade laws which establish a minimum resale price for branded merchandise. Presented below are examples of the two extreme opposite viewpoints.)

* * *

NEW YORK—A nationally-known manufacturer of small electrical appliances is now marketing its products under the fair trade laws of 45 states in which is regarded as a major innovation in distribution policies.

H. B. Davis, New York district manager, Toastmaster Products Division of McGraw Electric Co., explained in a press interview May 23 that his company seeks through the move to guarantee uniformity of prices on a national basis.

The company's step is reported as being watched by other similar manufacturers to determine to what extent it may indicate future success for registration under fair trade acts of a large number of additional lines of commercial and industrial equipment marketed through distributors.

Fair trade acts, authorizing minimum resale price contracts between manufacturers and distributors of trade-marked products, are currently

(Concluded on Page 4, Column 4)

NEW YORK CITY—Charles W. Berg, of Standard Brand Distributors, a firm retailing nationally advertised electrical appliances, has appealed by letter May 20 to Gov. Thomas E. Dewey to do everything in his power to have the fair trade laws of New York State repealed so that the prices on many branded lines of merchandise could be brought down "as much as 30%."

Support for his appeal was immediately forthcoming from the Orange county, N. Y., chamber of commerce which offered to circulate petitions among local retail associations and chambers of commerce against fair trade agreements.

New York is one of 45 states which has a fair trade statute, authorizing minimum resale price contracts between manufacturers and retailers.

Pending action on his proposal that such laws be repealed, Mr. Berg asked the governor for "your moral

(Concluded on Page 4, Column 5)

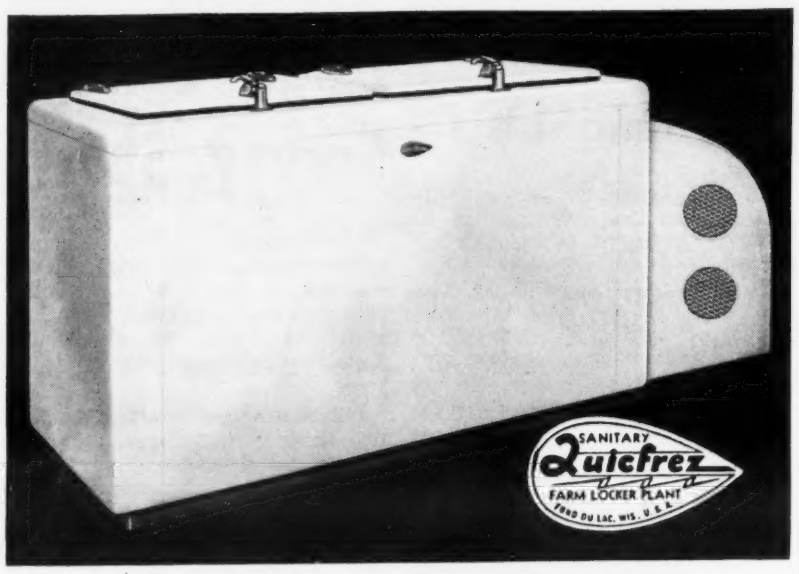
Sanitary Quicfrez

THE PIONEER OF FARM LOCKER PLANTS NOW READY FOR IMMEDIATE DELIVERY

Built to the highest quality standards throughout.

Complete, with Condenser Units—ready for you to install. Everything about the "QUICFREZ" Farm Locker Plant is engineered and built for years of dependable service. Thousands in daily operation since 1939.

Valuable Exclusive territory open. Write or wire for franchise information. Sanitary has several good openings for salesmen.



SANITARY REFRIGERATOR COMPANY

FOND DU LAC, WISCONSIN

Ice Refrigerators For More Than 40 Years—
Quicfrez Farm Lockers Since 1939

Big Gas Station Chains, Independents See Water Coolers Aiding Sales

CHICAGO—The use of mechanically refrigerated water coolers in gas stations to attract the patronage of passing motorists is being planned by both major oil refiners and independent station operators, water cooler companies in the Refrigeration Equipment Manufacturers Association, have reported.

"The appeal to motorists of having dependable drinking water readily available will create an additional demand for water coolers," an industry spokesman declared.

Water cooler production, he noted, is already greater than in any previous year.

The Shell Oil Co., he asserted, has constructed a number of super service stations in which water coolers are installed. In conjunction with rearrangement of display shelves and other innovations, they are expected to boost sales.

Stewart Ice Machine Moves Into New Pomona Factory Bldg.

POMONA, Calif.—The Stewart Ice Machine Co. has moved into its own new factory building at 1282 W. First St. here, M. L. Stewart, manager, has announced.

The 26 year old firm manufactures refrigeration condensing units ranging from 1½-hp. to 20-hp. capacity for ammonia, methyl chloride, and "Freon" refrigerants.

FF Locker Institute Handles Exhibits at National Convention Only, Farquhar Says

OMAHA, Neb. — Frozen Food Locker Institute, Inc., here recently made it clear that it does not assume any responsibility nor participate in any way in either state or regional locker conventions.

The Institute's position was explained in a review of the principal points of its agreement with the National Frozen Food Locker Association regarding exhibits for conventions.

R. R. Farquhar, executive director of the Institute, said the review was intended to clarify any doubts about locker meetings and disclaim officially any responsibility on the part of the Institute for such action as the solicitation of prizes, excessive exhibit prices, and poor exhibit arrangements.

Principal points of the agreement follow:

State conventions: "The conduct and management of state conventions shall rest solely in various state frozen food locker associations. Where such groups desire to hold exhibits in connection with their state meetings, it is recommended and shall be the announced policy of the groups representing the National Frozen Food Locker Association and the Frozen Food Locker Institute that solicitation of such exhibitors shall be confined to those contractors, jobbers, sales representatives, and manufacturers located within the respective states."

Regional conventions: "The policies as outlined above for state conventions shall be applicable to such regional conventions as may be held in various parts of the country. The Frozen Food Locker Institute, as such, does not assume any responsibility nor participate in any way in either the state or the regional conventions."

National conventions: "The program, registration policies, official convention program, etc. shall be in charge of the National Frozen Food Locker Association, who are the sponsors of such national conventions. The Frozen Food Locker Institute shall be in charge of the convention exhibits and the sale of exhibit space.

"After deducting from the proceeds of such exhibits the usual expenses such as rent, cost of promotion, mailing, postage, booth equipment, and decorations, etc., the net proceeds shall be equally divided between the two associations."

Proper Refrigeration

Omaha Restaurants Must Have It Under New Law

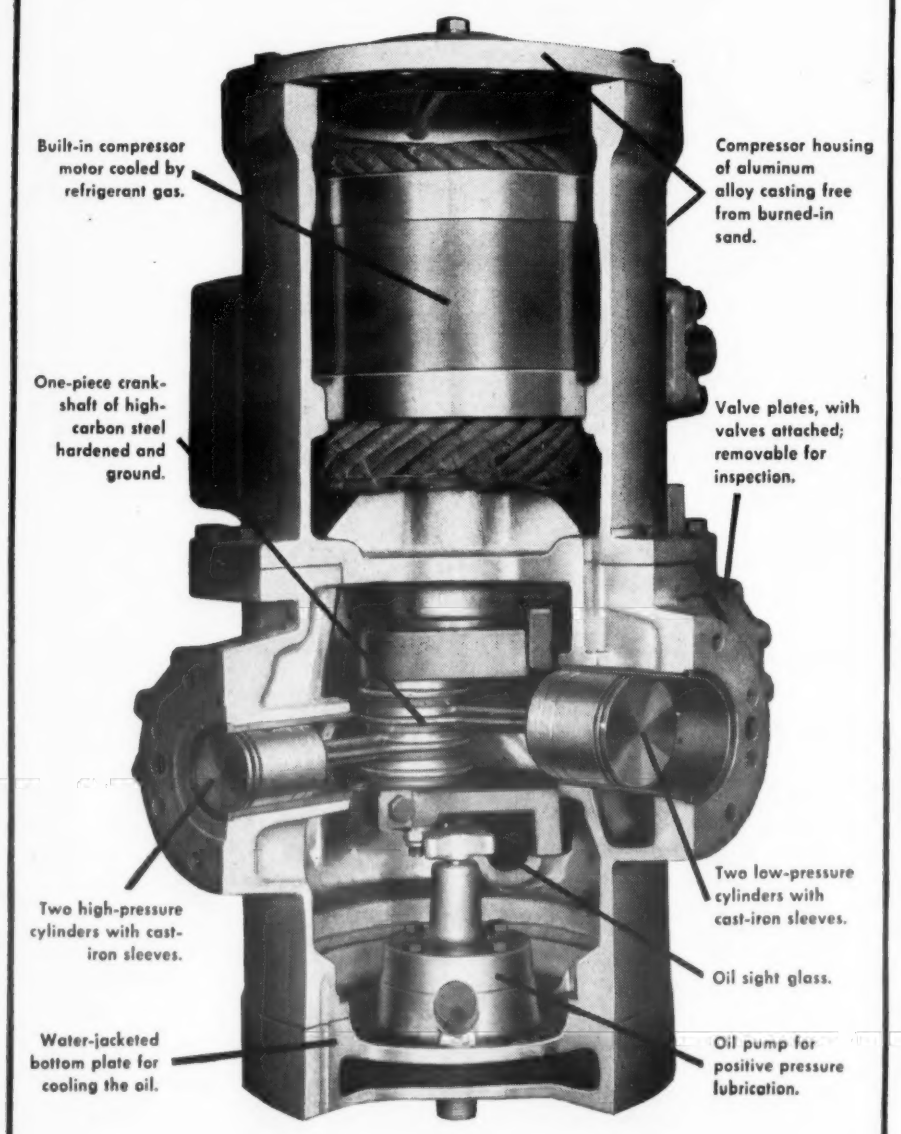
OMAHA, Neb.—Proper refrigeration is one of 17 specific standards that Omaha restaurants and other food-dispensing establishments will have to measure up to under a new ordinance introduced in the city council.

City Health Director L. L. Featheree said the measure was prepared by the city health department in cooperation with the Omaha Restaurant Association.

Accent is on prevention under the proposed new law, Dr. Featheree pointed out, and seven or eight sanitary inspectors will be employed instead of one as at present. Adequacy of refrigeration facilities will be an important part and will have to be provided before the eating place can get a permit to operate, according to Dr. Featheree.

Refrigeration requirements will be based on the need of the establishment in question to safeguard the wholesomeness of the food and drink it dispenses.

Gemco's 2-Stage Compressor


Built-in compressor motor cooled by refrigerant gas.
Compressor housing of aluminum alloy casting free from burned-in sand.
One-piece crankshaft of high-carbon steel hardened and ground.
Valve plates, with valves attached; removable for inspection.
Two low-pressure cylinders with cast-iron sleeves.
Two high-pressure cylinders with cast-iron sleeves.
Oil sight glass.
Water-jacketed bottom plate for cooling the oil.
Oil pump for positive pressure lubrication.

one of the EXCLUSIVE FEATURES that sent other designers hurrying to their drawing boards to try to match GEMCO performance

Gemco's 2-stage Compressor was a sensation when first shown at the Air Conditioning Exposition. And it has been a sensation since Gemco Packaged Air Conditioners went on the market in January.

Production of Gemco Compressors is well ahead of the original schedule. That's one of the reasons why Gemco shipments are setting records for a first-year manufacturer in the air-conditioning field.

Gemco
AIR-CONDITIONING

General Engineering and Manufacturing Co.
4417 OLEATHA, ST. LOUIS 16, MO.
Makers of Gemco Precision Shapers and Machine Tools, Gemco Oil Field Equipment, etc.

St. Joseph Refrigeration Group Starts 1-Year Campaign of Advertising

ST. JOSEPH, Mo.—Air conditioning and refrigeration men (and women) who formed an association two years ago in St. Joseph have started an advertising campaign in the form of newspaper advertisements to inform the public of their work and aims.

This organization is called the Refrigeration Association of St. Joseph and is composed of sales and service organizations, salesmen, wholesalers, and dealers of refrigeration and air conditioning equipment. At the present time the officers of this association are: Fred Donovan, president; John Stilgenbauer, vice president; Tom Hodgen, secretary; and Harold Walters, treasurer. Merle Murray is the chairman of a three man board of directors.

The association meets twice monthly on the first and third Thursdays of each month. The first monthly meeting is a social gathering and the second is devoted to business.

To better acquaint the public with this organization and its members a 52 issue 26-inch advertisement has been purchased from the *St. Joseph News-Press*. This series of advertisements started Sunday April 13 and will continue each Sunday for one year.

Over this period of time, the names of the members of this association, the names of the business firms participating, the resolutions of this organization and all other pertinent facts relating to the public relationship will be publicized through the advertisements.

FREEZER SENTRY

THE POSITIVE ALARM FOR ALL FROZEN FOOD CABINETS

- The simplest device you have ever seen to warn of mechanical troubles. Designed for use in any low temperature cabinet. Can be installed in two minutes by anyone.

Buzzer, battery operated. Trickle charger insures five-year battery life. Buzzer operates 100 hours. Actuated at plus 12°F by mercury contact. No thermostat to get out of order. Action is as positive as gravity.

A package item that sells itself on the first service call, or to new owners of freezers.

Immediate delivery. Write us for details and discounts.

JEWETT ASSOCIATES
1053 MAIN ST. BUFFALO 8, N. Y.

GET THIS NEWEST SPRING CATALOG NO. 143

Send for YOUR COPY of the New Spring DEPENDABOOK today! Use YOUR letterhead please.

THE HARRY ALTER CO., INC.
1728 SO. MICHIGAN AVENUE CHICAGO 16, ILL.
134 LAFAYETTE STREET NEW YORK 13, N. Y.

NEW Redmond 1/20th HORSEPOWER MICROMOTOR

for

BLOWER COILS

★

AIR CONDITIONERS

★

VENTILATORS

★

and HEATERS

Long-Life Type "U"

ESPECIALLY if you're hankering for twentieth horsepower jobs, you'll want every last detail on the new Redmond Type "U" long-life Micromotor.

The basic design for this new Type "U" was determined by thoroughly checking requirements of the motor-consuming markets. As a result, the Type "U" embodies these desirable key features:

Shaded pole design, for speed control and utmost reliability.

Generous broadly spaced bearings, for maximum smoothness.

Super-Life lubrication, to permit continuous operation for unlimited periods, with Micromotor mounted in any position.

Sturdy die cast construction, in modern functional styling.

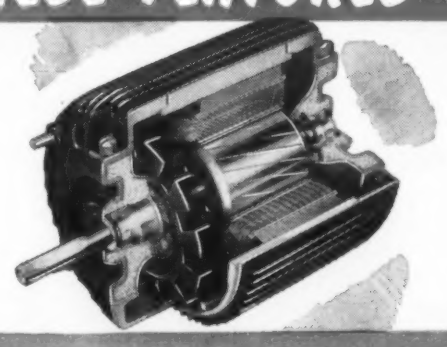
The engineers went the whole way. You'll find the Type "U" loaded with remarkable engineering accomplishments.

It's the culmination of years of designing, testing and mass production experience. It's built by the same specialists who have already turned out more than 20,000,000 dependable Redmond Micromotors. It's the kind of motor you'll want.

Phone or drop us a line today for complete information.

You Get ALL THESE FEATURES In The Type "U"

- ★ Full 1/20 HP. at 1500 R. P. M.
- ★ Totally enclosed 4-pole shaded pole
- ★ 2 sq. inches bearing surfaces
- ★ Bearings spaced 5 inches overall
- ★ Individually fitted bearings
- ★ 6 cu. inches in oil reservoirs
- ★ Super-Life circulating lubrication
- ★ Operates in any position



- ★ Lubricated silent thrust washers
- ★ Flush-Weld precision skewed rotor
- ★ Humidity and oil resistant windings
- ★ Controlled end play
- ★ Sturdy die cast machined frame
- ★ Fin-Line functional styling
- ★ 198 sq. inches cooling surface
- ★ Internal air circulation

Redmond COMPANY, Inc.

MAIN OFFICES: OWOSSO, MICHIGAN, U.S.A.

REDMOND

Composite view of Redmond Plants

REDMOND FACILITIES INCLUDE 2500 EMPLOYEES AND MORE THAN 5 ACRES FLOOR AREA

The NAT Corporation of Kansas City

Combines
Appearance and Performance
with PRACTICAL Design
•
Finished Crackled Brown or
Hammered Grey Baked Enamel

announces
THE NEW
NAT
(self contained)
AIR CONDITIONER

The Nat Air-conditioning Unit's unique design, based on 17 years of research directed by Nathan Baraban, makes it—

The Answer to the Service-Man's Prayer

All working parts are accessible without having to tear down the cabinet. A saving of time and labor.

The NAT Unit comes in 3 sizes: 3.0, 4.2 and 5.4 Tons

Sold through exclusive dealers and distributors some territory still open — inquiries invited

The NAT *Corporation*

2710 McGee Trafficway • Phone HA. 1892 • KANSAS CITY, MISSOURI

The Nat Corporation also manufactures the NAT Suspended Gas-Fired Unit Heater

Gas Appliance Mfrs. Tell How Excise Tax Hurts Public, Trade

NEW YORK CITY — Immediate repeal of Federal excise taxes on domestic and commercial gas ranges and automatic gas water heaters is being sought by the Gas Appliance Manufacturers Association.

In briefs prepared for submission to the House of Representatives ways and means committee, the Association contends that these appliances are not luxuries, but necessities, according to Harold Massey, assistant managing director of the group.

The briefs further point out that such taxes are discriminatory because they are not also applied to vacuum cleaners and other appliances, he said.

The tax amounts to 10% of the manufacturer's price, he noted. By the time the distributor and retailer have marked up their margins to cover the tax, the additional cost to the consumer for these appliances is sometimes double the amount the manufacturer pays to the Government, he declared.

Mr. Massey further argued that the price of new homes to veterans when the price of the home includes a gas refrigerator, range, and water heater, may be reduced by $50 by eliminating the excise tax.

The Association is making no plea on behalf of gas refrigerators, he said, because all refrigerator manufacturers are attempting to get the excise tax removed from their products on the grounds that they are necessities and not luxuries.

One Manufacturer Goes 'All Out' on Fair Trade

(Concluded from Page 1, Column 3)

on the statute books of all states except Missouri, Texas, and Vermont.

McGraw Electric Co.'s new program covers toasters, food warmers, and toaster stands, and includes five points which were adopted only after a two-year survey of distributor attitudes.

Mr. Davis explained that under the plan:

1—The same discount is extended to all distributors, and no sales are made by the manufacturer except through authorized distributors who have signed a copy of the uniform fair trade agreement which has a price schedule attached applying to current prices.

2—The schedule of resale prices attached to the contract provides for graduated list prices based on quantities purchased on one order for delivery at one time.

3—A set discount has been established for distributor sales to other dealers who cannot buy direct from the factory, but under fair trade contracts the other dealers have to adhere to registered resale prices.

4—Registration under fair trade acts has been made in all states with such laws.

5—All authorized distributors are required to conform to the manufacturers specifications on stocks, displays, and service.

Mr. Davis said that in the short time since introduction of the plan, distributors have expressed enthusiastic approval and no trade difficulties have arisen.

Fair Trade Chief Warns Of 'Price Cut Spiral'

ST. LOUIS—Speaking before the Missouri Pharmaceutical Association's Convention here May 22, John W. Anderson, president of American Fair Trade Council, charged that the living standards of wage earners of America are threatened by a giant conspiracy of retail monopolists.

Mr. Anderson, a manufacturer of automotive products, claimed that "unrestricted price cutting on popular branded products makes it impossible for the smaller retailer to handle such products profitably." He said,

"When a popular product is used as competitive price bait the straightforward retailer, to avoid unfavorable price comparisons, is compelled to remove that product from his line or to keep it under the counter and supply it only when requested. This reasonable reaction soon creates a serious shrinkage in the manufacturer's sales volume. As his sales volume shrinks his manufacturing cost per unit increases—as overhead piles up on reduced output.

"This is where the real viciousness of the cut-price spiral asserts itself. The retail monopolist, through his driving the outraged product from his competitors' shelves, has come to represent the manufacturer's largest source of sales volume in the area affected. To stay a little longer in business the manufacturer is often persuaded to employ arbitrarily every possible means for removing quality from his product, to meet spiraling demands for lower and lower prices.

"First to come out of the product is that narrow top margin of quality which usually multiplies the value of the product to the consumer. Often the top 10%, of cost incurred in adding quality, increases by several times the value of the product to the consumer.

"By the same token, the arbitrary elimination of that narrow margin often reduces the value of the product to a small fraction of its normal standard. The product may not be altered in appearance enough to be noticeable to the consumer. But he doesn't get the measure of value per dime invested that he got before. He pays more for less—regardless of the fact that the price tag may be constantly more attractive.

"The manufacturer whose product is caught in this quality squeeze finds neither the means nor the mood for improving wage rates in his factory. The wage earner, whose dollar buys constantly less, finds that dollar constantly harder to get.

"To so extort from the worker means that some portion of that worker's time and energy is thereby appropriated unfairly by the monopolist. To whatever extent such an unfair advantage is taken, the worker in fact becomes a slave to the monopolist. Thus, by enslaving a portion of the energies of many people, the extortionist acquiries perhaps more unholy profit than could be crushed out of a smaller number of slaves completely owned and fully employed."

Mr. Anderson contends that "the only effective protection of the wage earner against predatory retail monopolists is to strengthen Fair Trade Laws to provide that all manufacturers of competitive branded products must designate the exact prices at which wholesalers must sell those products to retailers and the prices at which retailers must sell those products to the public. The present Fair Trade Laws merely permit the manufacturer, if he chooses, to name the prices at which his branded product must be resold, provided, in all instances, that the product is in open competition with more than one other product of the same general class.

"It has long been the contention of American Fair Trade Council," said Mr. Anderson, "that manufacturers should control the pricing of their branded products since manufacturers have most to lose by any overpricing of their products to the consumer."

Mr. Anderson pointed out that "manufacturers' heavy investments in factory facilities become of no value unless their products continue to sell. Wholesalers and retailers, on the other hand, have only a temporary investment in stocks of the branded merchandise. They may sell those stocks at any price they like, close out the items in good faith, and substitute competitive products, without violating any one of the Fair Trade Laws of the 45 states which have such laws."

Opponent of Fair Trade Cites Needed Price Cuts

(Concluded from Page 1, Column 4)

support if we cut prices during these trying times."

Mr. Berg contended that if the fair trade laws were abolished his firm and many others could cut prices substantially "and thus stimulate business in New York State and avoid the coming depression."

The electrical appliance distributor sent Gov. Dewey a copy of a letter from the White House in reply to an appeal by Mr. Berg for moral support from the President if Standard Brand Distributors should cut prices in violation of fair trade contracts. The White House reply said that, while the President appreciated the desire to lower prices, the White House "cannot encourage you to violate any law or laws which prohibit the action you propose." It was suggested Mr. Berg confer with the Department of Justice.

Informing the governor that he intended to confer with the Department of Justice, Mr. Berg added:

"However, we feel that this problem of high prices is your problem, too, and that you are in a better position to help than the Department of Justice. The fair trade laws of New York State (which you undoubtedly would have vetoed had you been governor at the time they were passed) tend to throttle competition and prevent the lowering of prices."

Mr. Berg listed several specific nationally advertised branded products whose fair trade prices, he claimed, could be reduced sharply. He mentioned a washing machine with a $299.95 fair trade price, which he said could be sold at $249.95; a pressure cooker with a fair trade price of $12.95, which he said could be sold at $9.95; a vacuum cleaner with a fair trade price of $54.95, which he claimed could be sold at $39.95, and a radio fair-traded at $34.95, which he held could be sold for $24.95.

Extra values through

JACK & HEINTZ

Mass Precision

The rubber "shock absorbers" that support Jack & Heintz motors are *square.* There is no danger of the motor frame rotating in service. This four-sided design puts Jack & Heintz fractional horsepower motor frames in their intended position, and keeps them there permanently . . . for years of *quiet, dependable operation.*

JACK & HEINTZ PRECISION INDUSTRIES, INC., *Cleveland 1, Ohio*

EXPERIENCED MEN CAN SERVE YOU BEST

COMPLETE LINE OF REFRIGERATION SUPPLIES TOOLS AND ACCESSORIES

EACH MONTH THIS FELLOW APPEARS IN
THE LIQUID LINE
THE INDUSTRY'S OLDEST HOUSE ORGAN
ARE YOU ON OUR MAILING LIST?

WEST COAST SUPPLY JOBBERS SINCE 1928

REFRIGERATION SERVICE INC
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LOS ANGELES 4 CALIF

Manufacturer enthusiastically adopts Plan

Okays proofs for new campaign

Mrs. Chicago sees ad with dealer's name in Tribune

Get the Jump *on competition*

WITH THE CHICAGO TRIBUNE'S SELECTIVE AREA ADVERTISING PLAN

Mr. and Mrs. Chicago hurry to dealer and buy!

Identifying your local outlets—prominently—can pay fast dividends and build a stronger selling organization. The Chicago Tribune's Selective Area Advertising Plan does this for you. Under this plan—

EACH DEALER GETS

1. Selective coverage of his local market
2. Prominent display of his name and location
3. The low rate of just 2½c a line!

YOU GET

1. Better identification of your local outlets
2. Enthusiastic dealer support
3. Advertising that pays off right away!

Not only do you steal a march on competition, but you can corral more of the Great Chicago Market . . . a market so large it can take all or the greater part of the production of many manufacturers. This plan will make more valuable to you the exhaustive findings of the Tribune's Durable Goods Study among dealers and consumers.

To learn how it will meet your specific needs, write your nearest Tribune representative as shown below.

For quick, effective coverage of the Great Chicago Market, there is no medium quite like the Chicago Tribune. 63.4% of the $414,757,552 volume for home appliance purchases during the first year they are available will be spent by Tribune-reading families. Rates per line per 100,000 circulation are among the lowest in America.

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The World's Greatest Newspaper

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E. P. Struhsacker, Chicago Tribune
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Fitzpatrick and Chamberlin
155 Montgomery St., San Francisco 4

W. E. Bates, Chicago Tribune
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ELECTRICAL AND AUTOMOTIVE PRODUCTS

Field Report

Before the war one of the most popular editorial features to appear in the NEWS was the "Field Report," which is now being resumed.

In the "Field Report" the editors and staff correspondents of the NEWS bring to the readers, not their own opinions and interpretations, but report what distributors, dealers, and service contractors are currently finding out about the market, prices, service charges, and all the other problems that arise in distributing the industry's products.

Block-Square May Co. Hollywood Appliance Annex Concentrates on Planning the 'Complete Kitchen'

By C. Dale Mericle

LOS ANGELES — "Fabulous" is probably the best word to describe the block-square appliance annex of the May Co. store located on the equally fabulous Wilshire Blvd. in the Hollywood-Beverly Hills district here.

Row upon row of refrigerators, ranges, and other appliances, and ultra-modern model kitchens combine to make this one of the largest and most modern appliance operations on the west coast, if not in the country.

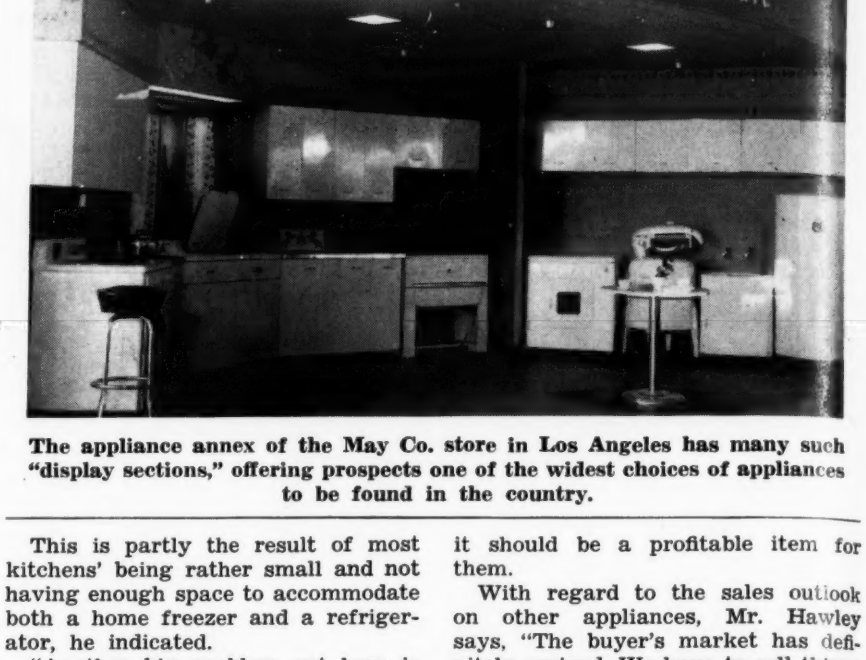
Represented are 11 refrigerator lines, 13 home freezers, nine makes of electric ranges, 14 brands of washers, 10 water heaters, nine ironers, 14 gas range makes, three models of dishwashers, and numerous small appliances. A complete kitchen planning and installation service is also offered.

Three men divide up the responsibility for running the major appliance operations of the annex. C. W. O'Reilly manages the refrigerator and freezer section; C. Hawley is in charge of major appliances other than refrigerators and freezers, and John J. Reinhardt heads up the complete kitchen department.

Despite the company's wide representation on refrigerators, May is not meeting demand as yet for this appliance, according to Mr. O'Reilly, but on most other items, even washers, supply is running ahead of demand, points out Mr. Hawley.

"We're doing a fairly good freezer business," comments Mr. O'Reilly. "For one thing we tap the wealthy Beverly Hills district. And there is considerable interest in two-temperature household refrigerators."

Offering Customer Wide Choice



The appliance annex of the May Co. store in Los Angeles has many such "display sections," offering prospects one of the widest choices of appliances to be found in the country.

This is partly the result of most kitchens' being rather small and not having enough space to accommodate both a home freezer and a refrigerator, he indicated.

"Another big problem out here is the fact that most homes, even the big ones, have small doors which make it impossible to bring a big unit, such as a large freezer, into the house, even for installation in the basement. There are usually no outside doors leading to the basement. Often the big freezers are installed in the garage.

Freezer Market Untouched

"There's a terrific amount of education work, however, to be done on freezers and frozen foods," added Mr. O'Reilly. "We haven't scratched the surface yet. Present users and prospects for home freezers are thinking only of buying packaged frozen food, and not of the advantages of freezing foods themselves. The situation is similar to that which confronted the household refrigerator people 20 years ago.

"When freezers are in good supply we plan to conduct regular meetings for the public in our auditorium, which seats 175. Here home economists will show prospects and customers how to get the most out of their home freezer."

Just now Mr. O'Reilly is experimenting with the sales possibilities of a small Weber fountainette. This is aimed at the wealthy Beverly Hills market, and Mr. O'Reilly feels that it should be a profitable item for them.

With regard to the sales outlook on other appliances, Mr. Hawley says, "The buyer's market has definitely arrived. We have to sell things now instead of merely taking orders."

Home Demonstration Vital

One important point in the firm's operation, as stressed by Mr. Hawley, is the home demonstration given on all automatic washers and most ironers. Customer preference on washers, incidentally, runs about 50-50 on the automatic vs. wringer types, he said.

"Some customers just won't have an automatic, while others have their hearts set on one," commented Mr. Hawley.

The home laundry demonstrators are sent out by the distributors, the charge going to the May Co., however. Launderall demonstrations are made as soon as the washer is installed, while Bendix waits about three weeks to give the user some experience with the washer before the demonstrator arrives, he explained.

No Advance Orders

May does not take any advance orders on appliances, according to Mr. Hawley, who states that "we have profited by other stores' activities in this matter." Salesmen sometimes make a note of the customer's name and may attempt to steer an

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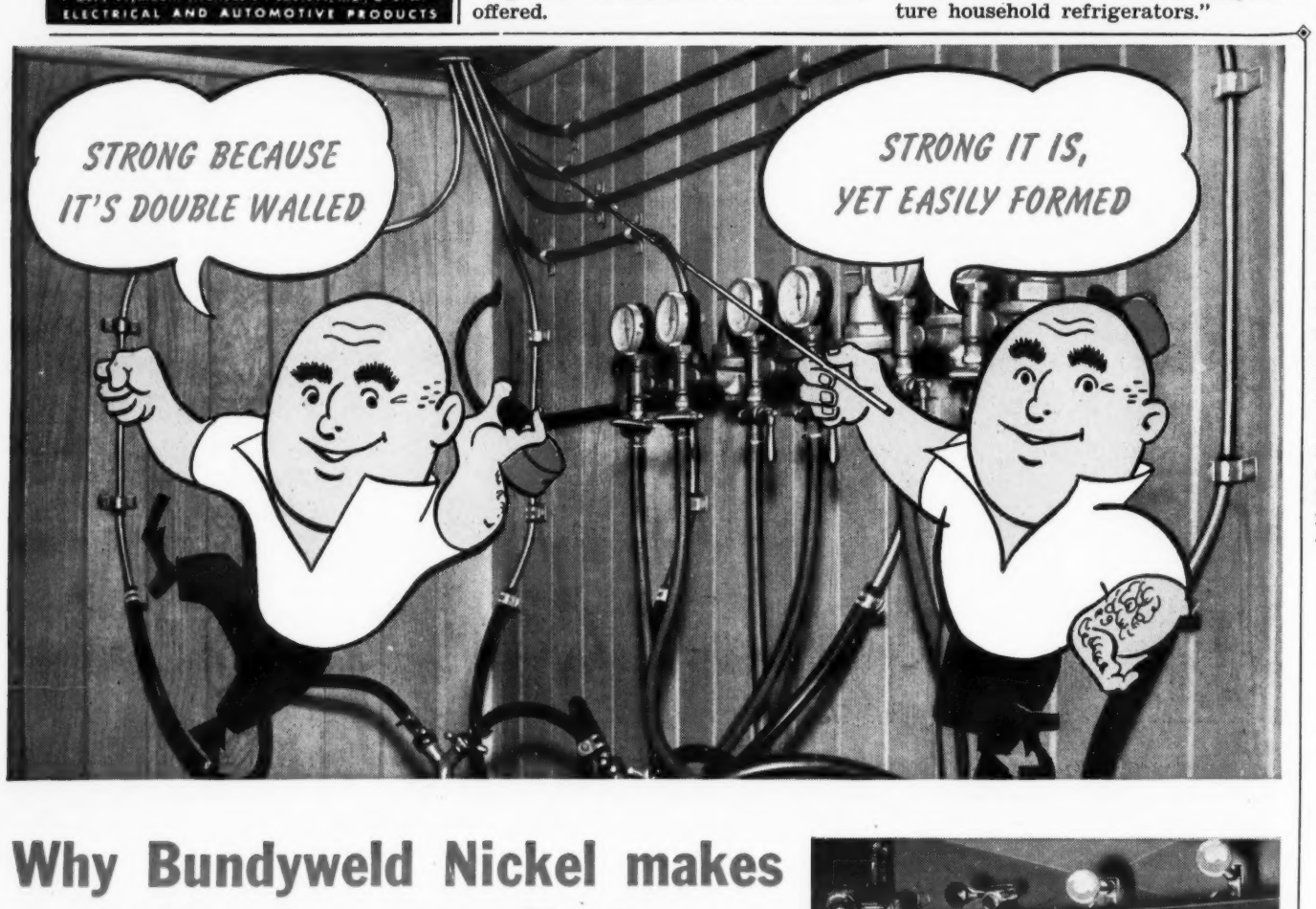
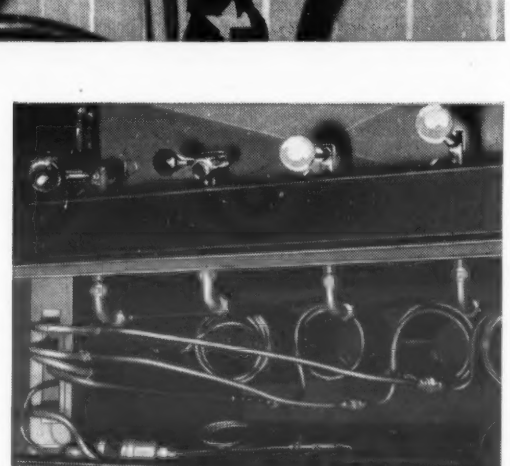


Why Bundyweld Nickel makes better beverage Tubing

Name your beverage cooling job, and make it tough! Give it all the twists and turns you want, and make sure you insist on tubing that can turn around a dime and still stay strong.

Then turn the problem over to Bundyweld Nickel Tubing. You will be surprised at the easy way Bundyweld Nickel handles tough assignments.



Short-radius bends like these do not change the tubular structure of Bundyweld Nickel Tubing. These photographs show a typical Bundyweld nickel tubing installation.

CHECK THESE 7 VITAL ADVANTAGES

1. Costs no more than old types of tubing for beer, carbonated water and drinking water . . . yet outlasts them all because of the well-known corrosion resistant properties of nickel.

2. Fast cooling . . . because high-strength Bundyweld Nickel Tubing permits using thin walls.

3. Resists denting, collapsing or bursting . . . because of Bundyweld double wall construction plus inherent strength in nickel.

4. Protects purity . . . promotes hygienic cleanliness as attested by world-wide use of nickel in beverage and food processing equipment.

5. Easy to clean . . . any ordinary cleaning compounds or fluids keep nickel tubing fresh and sanitary.

6. Easy to form . . . coils more easily than other high-strength materials, and forms readily to any contour wanted in running leader lines through conduits. Various standard type fittings can be used.

7. Ready for you today . . . in coils up to 100 feet, in standard diameters.

Write today for FREE NEW BOOKLET—"How a Double Wall Gave a New Twist To Tubing" . . . gives all the facts you want to know about this new type Bundyweld nickel tubing. Your nearest distributor listed below will mail you the booklet and any other information about Bundyweld Monel and nickel tubing. *Bundy Tubing Company, Detroit 14, Michigan.*

BUNDY TUBING
ENGINEERED TO YOUR EXPECTATIONS

BUNDY TUBING DISTRIBUTORS AND REPRESENTATIVES — BUNDYWELD NICKEL AND MONEL TUBING:

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METAL GOODS CORP.
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HOUSTON 1, 16 DRENNAN
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TULSA 3, 302 NO. BOSTON ST.
PACIFIC METALS CO., LTD.
LOS ANGELES 21, 1400 S. ALAMEDA ST.
SAN FRANCISCO 10, 3100 19TH ST.
STEEL SALES CORP.
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DETROIT 10, 5151 WESSON AVE.
INDIANAPOLIS 2, 1916 NO. MERIDIAN ST.
MILWAUKEE 4, 647 W. VIRGINIA ST.
MINNEAPOLIS 15, 529 S. 7TH ST.
ST. LOUIS 10, 4565 MCREE AVE.
J. M. TULL METAL & SUPPLY CO.
ATLANTA 3, 285 MARIETTA ST.
WILLIAMS AND CO., INC.
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CLEVELAND 14, 3700-3716 PERKINS AVE.
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PITTSBURGH 12, 901-937 PENNSYLVANIA AVE., N.S.
TOLEDO 2, 850 E. WOODRUFF AVE.
WHITEHEAD METAL PROD. CO., INC.
BALTIMORE 17, 413 W. NORTH AVE.
BOSTON 39, 281 ALBANY ST., CAMBRIDGE, MASS.
BUFFALO 2, 254 COURT ST.
NEWARK 5, 205 FRELINGHUYSEN AVE.
NEW YORK 14, 303 WEST 10TH ST.
PHILADELPHIA 40, 1955-75 HUNTING PARK AVE.
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BUT . . .

It passed from the American scene when metropolitan traffic grew too heavy for its one horse power. Today's streamlined model is an engineering triumph, embodying efficiency, speed and control among its many features.

CHEMICALS ACP PROCESSES
RUST PROOFING AND PAINT BONDING
Granodine *
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*Duridine**
the modern metal conditioner, gives you similar advantages.
Duridine cleans — removes oil, grease and other surface soil. It also phosphatizes — changes the metallic surface into a non-conductive phosphate film of uniform crystalline structure, a durable bond for organic finishes.
Utilizing power spray washers of mild steel construction, and applied in a simple, fool-proof process, DURIDINE provides outstanding protection for painted sheet metal products.

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AMERICAN CHEMICAL PAINT CO.
AMBLER ACP PENNA.

May Co. Annex--

(Concluded from preceding page)

appliance his way, but that's between the salesman and prospect.

Dishwashers should have a good market among the wealthy movieland customers, Mr. Hawley believes.

"A few General Electric combination sinks and dishwashers arrived last week and sold like hotcakes."

Selling and installing complete kitchens and bathrooms is an important aspect of the May Co. appliance annex directed by Mr. Reinhardt.

"Service is the chief trick in complete kitchen sales," he emphasizes. "By 'service' I mean that we can offer to do the complete job for the customer on a kitchen or bathroom. We'll plan the arrangement in detail, according to his or her wishes, and then see that it is installed from floor to ceiling, without the customer's having to worry about anything."

Some Kitchens Cost $3,000

May Co. has its own designing and installation crews, and the average kitchen installation ranges in price from around $1,500 to $3,000, said Mr. Reinhardt.

"Due to the tremendous housing expansion out here, this complete kitchen operation has a big field, despite the fact that most people in this area don't really pay much attention to their kitchens," he declared.

This comparative lack of interest in kitchens is largely the result of the fact that the people in this area spend so much time out of doors, he believes.

Although thoroughly convinced of the opportunities in the complete kitchen field, Mr. Reinhardt cautions that it is a complicated business and "you have to know what you're doing" to make a success of it.

C. W. O'Reilly (right) demonstrates the Weber fountainette, one of the specialty refrigeration items in the May Co. refrigeration department which he heads up.

Fewer Lines Aid Sales Effort, L. A. Dealers Find

LOS ANGELES—There seems to be a rapidly growing trend among appliance dealers in the Los Angeles area to cut down on the number of franchise lines carried.

One of the city's largest established exclusive appliance dealerships, carrying Philco, General Electric, Gibson, Admiral, and Crosley refrigerators has found that although so complete a lineup produced more prospects during the sparse postwar period, maintaining a stock of repair parts, advertising, etc., is too costly to stock so many lines. This store was cutting its refrigerator lines to three, washing machines to two, and range lines to two, one electric and one gas, in the latter connection.

Store Cuts Franchises

A leading department store, likewise featuring five lines of refrigerators, and as many as eight in washing machines and ranges, has standardized on two leading nationally-advertised lines in each variety of appliance. The appliance management has announced that this change was made in order to "give salesmen a more solid competitive background in talking up their line."

A third dealer, located in Hollywood, has done a sharp about-face after latching on to nine additional franchises since the end of the war. Conflicting claims in refrigerators, ranges, washing machines, and home freezers, it was found, were more likely to cause lack of confidence on the part of the customer than to bring in traffic.

Dealers almost uniformly blame "overfranchising" on distributors, pointing out that many distributors have refused to deliver a leading refrigerator line, for example, unless the retailer took along with it a lesser-known brand of washing machine, stove, or home freezer. Home freezers, incidentally, were named as the chief offenders in a dozen stores surveyed—only one or two lines being nationally advertised and the rest representing a considerable question mark in the customer's mind.

"Overfranchising simply means that the dealer is spreading his efforts too thin," one prominent appliance retailer pointed out. "I feel that in the long run, carrying only one or two lines in every type of appliance will build more confidence, facilitate repair service, and encourage a better quality of trade-in appliance."

2 More Frozen Food Locker Construction Projects OK'd

WASHINGTON, D. C. — Applications for the construction of a frozen food locker plant in Auburn, Calif. and for an addition to another frozen food locker plant in Siguorney, Iowa were approved recently by the Office of the Housing Expediter.

John A. Livingston, applicant for the California plant, set the cost at $38,000. Henry Hackert estimated the cost of the addition to his plant at $9,800.

Broussard Service Re-opens

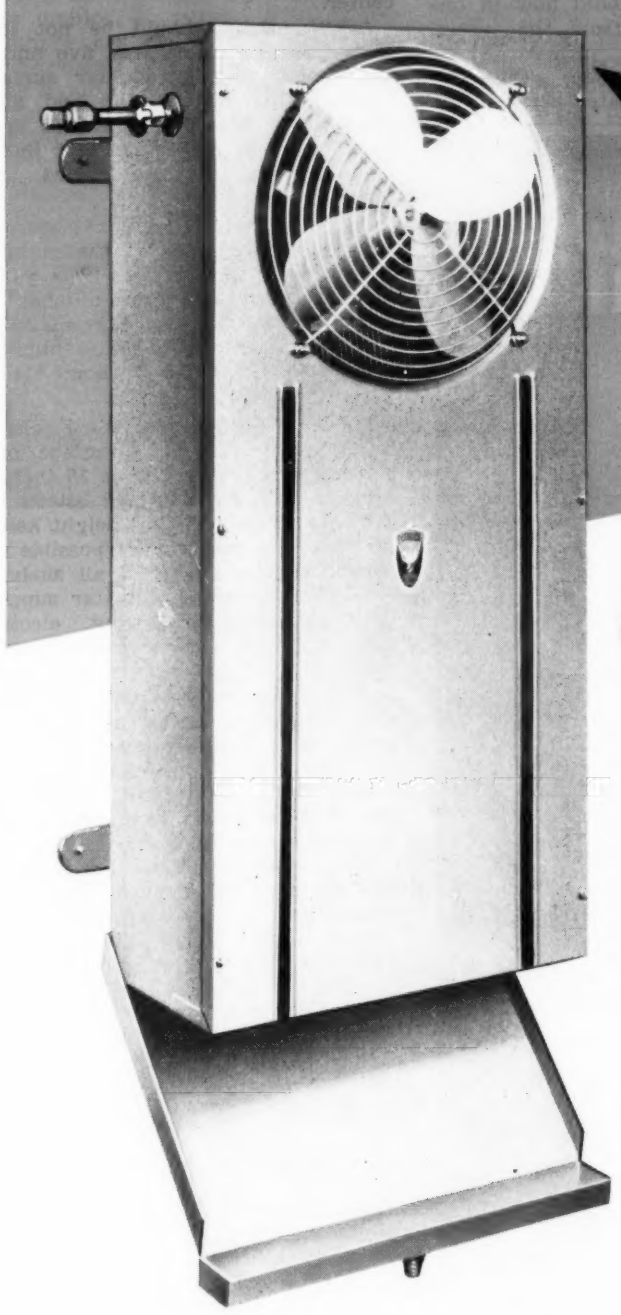
LAFAYETTE, La.—Nelec Broussard has re-opened his refrigeration service business at 318 South Buchanan St.

Noma Electric Negotiates $3,500,000 Bank Credit

NEW YORK CITY—Noma Electric Corp. is operating on a profitable basis and current billings are higher than those of a year ago, Henri Sadacca, president, declared in his annual report to stockholders.

He explained that Noma has arranged with a group of banks for a $3,500,000 revaluing credit at a 2½% per year interest rate in order to get more working capital.

"Operating result for the first six months of 1947, when considered later in the year in relation to the outlook then, will enable directors to determine the most practical dividend policy to pursue for the balance of 1947," Mr. Sadacci stated.



GUN COOLERS

● First as usual, Peerless conceived, created and now further improves the Gun Cooler line! Here is refrigeration as easy to install as hanging a clock. All engineering is done at the factory! Revolutionary, proved successful in thousands of installations, it reverses operation of conventional blower-type units, performs in upside-down fashion! Warm air is drawn into the grill at top of cooler, pours gently out the bottom chilled to the proper degree, absorbs heat from the stored products and rises to be re-chilled by the Gun Cooler. A sound, effective cooling cycle!

Peerless ANNOUNCES NEW MODELS!

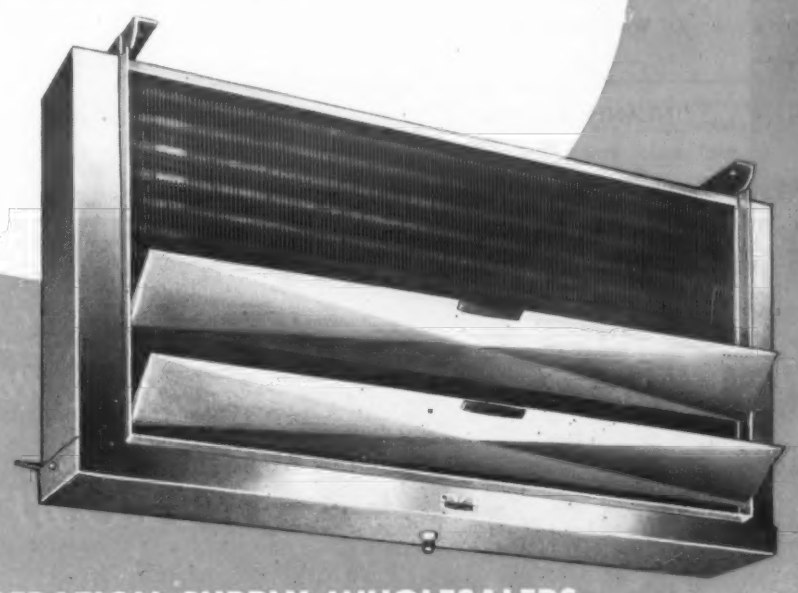
The Famous PEERLESS GUN COOLERS and Large UNIT COOLERS with Flash Tube Fin Coils!

● Literally champions! In smart styling, advanced design, and because they have an air-tight record for superior cooling at minimum operating cost. Peerless Unit Coolers never let their users down! Now more than ever, these coolers substantiate their reputation for "More Refrigeration per Dollar." New models, new improvements, everything which contributes to utter satisfaction is included in their make-up—beauty, compactness, unfailing mechanical performance! Attractive casings are heavy gauge, highly polished aluminum. In these units the basic Peerless policy stands out clearly—to produce low cost equipment by engineering developments, not by cutting corners! No sacrifice has been made in construction, materials or workmanship —nothing spared to make Peerless Unit Coolers the champions of their class.

● For superior performance specify all these PEERLESS products: Flash Plates, Flash Coolers, Unit Coolers, Ice Cube Makers, Fin Coils, Off Center Coils, Expansion Valves and Capacity Boosters. Write for details.

LARGE CAPACITY UNIT COOLERS

● Designed especially for installations requiring large refrigeration capacity in a minimum of space, these models are made long and narrow. They fit closely to the refrigerator ceiling, save storage space and reduce possibility of air being blown directly on the stored product. A typical Peerless product in attractive styling and painstaking workmanship.



SOLD THROUGH LEADING REFRIGERATION SUPPLY WHOLESALERS

PEERLESS of AMERICA, Inc.

General Sales Offices 2901 Lawrence Ave. • Chicago 25, Illinois, U.S.A.

New Westinghouse Dealer Service To Offer Kitchen, Laundry Planning 'While You Wait'

PITTSBURGH—Householders will soon be able to walk into their Westinghouse dealer's store and walk out half an hour or less later with a complete plan for their kitchen or laundry.

They will know the plan's exact cost, including installation, and they will have a full-color picture of their type of kitchen. And it won't cost them a cent.

All this will be possible under a new kitchen and laundry planning service which the Westinghouse Electric Appliance Division says will be available nationally on a limited scale this year. Here's how operation of this "while-you-wait" service is pictured:

Kitchen planning centers are to be established throughout the country in retail stores associated with Westinghouse. The company will train the kitchen planner for the dealer.

The dealer will be supplied with a copy of the recently developed Westinghouse Kitchen and Laundry Planning Guide, visualizer sheets showing colored pictures of eight types of kitchens, and grid-ruled paper for accurately drawing up floor plans from measurements provided by the customer.

The customer and the planner will sit down in the store and together work out a plan. Each customer is to be given a visualizer sheet depicting his general type of plan. On the back of each sheet are listed the necessary appliances and cabinets, prices, and an estimate of installation charges figured on the basis of local costs.

"The whole job," Westinghouse declares, "can be done in a few minutes."

The planning service was developed from eight fundamental principles of kitchen planning worked out by Mrs. Julia Kiene, director of the Westinghouse Home Economics Institute. She directed time and motion studies of a series of kitchen plans in the course of more than two years research.

These principles, some of which have been recognized before, were outlined as follows:

"First, the plan must be developed around three work centers: food storage and preparation, keyed to the refrigerator; cleaning, centered about sink and dishwasher; cooking and serving, keyed to the range.

"Second, work should flow in one direction, starting from the refrigerator.

"Third, the sink and dishwasher center should be located between the other two centers, since water is used at both of them.

"Fourth, there are seven types of kitchens: 'U,' Broken U, 'L,' Broken L, two-wall, one-wall, and individual center.

"Fifth, there should be not less than five, nor more than five and a half linear feet of counter surface between the refrigerator and sink bowl; there should be not less than three feet, nor more than four linear feet between the sink bowl and range.

"Sixth, wall and base storage needs are calculated on the number of bedrooms in a home. This yardstick is used since the number of bedrooms in a home is usually a permanent factor while the number of people living in a home is a variable factor.

"Seventh, the established clearance between counter surface and bottom of wall cabinets is 16 inches, between top of range and bottom of cabinets, 22 inches. This height keeps the cabinets as low as possible to permit easy reaching of all shelves.

"Eighth, proper hot water supply, lighting, adequate wiring, electric outlets, and ventilation must be provided.

"Our research proved," Mrs. Kiene said, "that the counter surface at the preparation center must be large enough to hold conveniently all the various foods and utensils needed in the preparation of any recipe. We found, too, that the refrigerator must not be separated from the preparation center if the work is to be done efficiently."

Key item of the service is the planning guide. It contains detailed plans for standard kitchens, limited-space kitchens, kitchenettes, laundries, and combination kitchen-laundries. Requirements for base and wall cabinets and equipment also are listed.

Working Out an On-the-Spot Plan

The trained planner at right is shown making use of the Westinghouse Kitchen & Laundry Planning Guide and the Visualizer Sheet to aid a customer in selecting the most useful type of kitchen layout.

Best Plan Quickly Found

Will M. Kline, Jr., assistant sales promotion manager of the appliance division, pointed out that the Guide is so arranged that by a process of elimination of possible plans, a solution for any problem is quickly made by the planner.

"For example," he said, "we know that 26 linear feet of usable wall space is needed in a room for the 'U' type kitchen, 21½ feet for the 'L' type, and 16 feet for the 'Broken U'. It is an easy matter for the planner to judge the possibilities of the problem before him by accurately determining the available space.

"Since all plans in the standard kitchen section of the Guide meet the requirements set up in Mrs. Kiene's eight principles, these plans assure the customer an ideal kitchen. We know that many kitchens will not meet all standards, and we have developed limited space kitchens and kitchenettes to meet these problems. . . ."

Planned laundries, according to Mr. Kline, present a much simpler problem than kitchens because the planner is not faced with the problem of fitting his sketch exactly to the room.

"The important thing in laundry planning," he stressed, "is that the centers of work follow each other in correct sequence.

"First is the preparation center for sorting and pre-treating of clothes. Second is the washing center. Third, the drying center. And fourth, the finishing center, for ironing and folding the clothes."

Mr. Kline, who developed the training program for the service, noted that the planning of kitchens and laundries is important as a full-line sales tool to the dealer "because it helps him sell single appliances, combinations of appliances and cabinets, single cabinets or sinks, and, most desirable of all, complete electric kitchens.

"It gives the dealer the opportunity of planning with his customer a long-range program of appliance and cabinet purchases," he said. "If a kitchen or laundry plan is made before the purchase of the first appliance, and the complete job cannot be done all at once, it is entirely feasible to carry out the plan a step at a time.

May Lead to More Sales

"By this means the dealer can keep in touch with his customer, thus increasing the probability of greater sales, because if customer and dealer work together toward the completion of the plan, more complete electric kitchens and planned laundries will be installed."

"Most planning services have been poor sales tools because they did not allow the dealer to offer scientific on-the-spot planning," he continued. "The time lag between the customer contact and the presentation of the plan, the necessity for making a charge, the impersonality of the service have all worked against its full effectiveness.

"We know that thousands of kitchen plans made for American homemakers—and plans for which they paid dollars—were thrown away," he added. "This new system of planner and customer working together allows the customer to state her personal preferences, and it permits the planner to state why his suggestions . . . are good ones."

A. Carl Bredahl, manager of the company's Better Homes Department, said the Guide was tested in actual use over a period of a year and a half, and was used by trained designers and by laymen.

THE INEXPENSIVE UTILITY FAVORITE

INLAND TILT OUT ICE CUBE TRAY

Low in price, yet high in utility, Inland's Magic Finish Tilt Out Tray is favored for original equipment by leading automatic refrigerator makers, as well as for replacement sales by dealers.

Fast freezing and "immediate delivery" of full-sized ice cubes—two at a time or a trayful — make the Tilt Out Tray the low priced favorite with users, too.

Moreover, the efficient Inland Tilt Out comes in both single tray and double duty Dessert Tray sizes, with or without pan lifter.

FOR TWO CUBES As shown in illustration above, it is easy to use the Operating Lever and get two or more full-sized ice cubes from the Inland Tilt Out Ice Cube Tray

FOR A TRAYFUL After cubes are loosened the grid is lifted vertically and cubes fall into the single tray pan — or Inland Dessert Ice Cube Tray Pan as shown above.

For prices and full information write to—
INLAND MANUFACTURING DIVISION, *General Motors Corporation, Dayton, Ohio*

FAST FREEZING
QUICK RELEASING
ICE TRAYS BY INLAND MANUFACTURING
INLAND

ASSISTANT PURCHASING AGENT
Refrigeration Experience Essential
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Makers of
REFRIGERATOR SHELVES • STAMPINGS
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Excellent deliveries.
Fair Prices.
Quality Products.

Report on Status of Refrigeration Codes--

(Concluded from Page 1)

Louis, for example, has a very much abbreviated and modified B-9 code, dated March 6, 1945.

Indiana has a state code which is a slight modification of the 1939 B-9 code. It was approved and promulgated May 26, 1944, and approved and adopted by the Indiana State Board of Health Aug. 27, 1944.

Omitting discussion of the codes of the several largest cities, and confining it to the medium and smaller size cities that abound everywhere, NARC gave its opinion that the best codes received were those of Oklahome City; Long Beach, Calif.; and Detroit and Grand Rapids, Mich. All are more recent, include licensing provisions, and are in handy booklet form.

BASIS FOR BEST CODES

Bearing in mind that the ASA-B9 code is dated April 20, 1939, Grand Rapids (164,292 population) brought out a rather thorough revision of the B-9 code in June, 1941.

Detroit (1,623,452 population) brought out its new code in September, 1945. Much of it is the same as the Grand Rapids code, but it does deviate in quite a few particulars; also, the technical portion is more detailed and comprehensive.

The Long Beach code (164,271 population) became effective in February, 1942. It, too, is a decided revision of the B-9 code, with the contents arranged differently than the Detroit and Grand Rapids codes, and much more boiled down.

The amended Oklahoma City code (204,424 population) was approved in September, 1945, making it one of the most recent revisions in use anywhere. However, it still retains considerable information from what is probably an earlier ASA code.

The other major question in the NARC survey concerns the licensing of refrigeration contractors and/or mechanics as a requisite to installation and service work. Of the 79 larger cities that replied, 6 or 7½% have license provisions or regulations; the 36 smaller cities have only one, or 3%. So, of the 115 cities that replied, 7, or 6% have license provisions.

Four of the cities named above are in the seven that require licenses so, it is important to point out the principal points and differences in them.

DETROIT REQUIRES LICENSES

Detroit requires a contractors license, obtainable by examination from an Examining Board comprising five men appointed by the Mayor. Two are members of the Department of Buildings and Safety Engineering, two are licensed contractors, and one is a user of refrigeration equipment. At least three years experience and a $1,000 bond are required for a contractors license. The fees are from $10 to $25.

An annual owner's license is required for maintenance and operation of commercial and industrial systems, and a biennial license for each multiple domestic system. Permits with fees and inspections are also required.

The Grand Rapids Code also provides for a contractors license, permits, fees and inspections, but no owner's license nor contractors' bond. The license fee is $25. The Board of Examiners comprises three men: the Building Inspector, the Fire Marshall, and a licensed contractor appointed by the Mayor.

The Long Beach code requires permits, fees and inspections; a contractors registration certificate; and certificates of qualifications for mechanics and journeymen. Mechanics must have five years practical experience, and journeymen three. The examination and renewal fees are $5.00 and $2.50 for mechanics; $3.00 and $1.00 for journeymen.

An applicant for a contractors license must himself have, or have in his employ, a person with a mechanic's certificate, and the initial and renewal fees are $50.00 each. The Examining Board consists of the Chief Refrigeration Inspector, two master refrigeration mechanics, and two journeymen refrigeration mechanics appointed by the City Manager.

Oklahoma City requires permits, fees and inspections, with licensing of contractors and three classes of journeymen. Contractors pay $50.00 initial fee, $20.00 annual renewal, and post a $2,000 bond. Examination fees for journeymen are $10.00 for Class One, $3.00 for Class Two and Three. Annual renewal fees are $1.00 for all classes.

The Examining Board consists of the City Building Superintendent, a licensed refrigeration contractor, and a journeyman who is not a licensed refrigeration contractor. The City Manager appoints the latter two.

REASONS FOR LICENSING

"On the question of licensing, NARC members have expressed a great deal of interest," said Mr. Weston. "There seems to be a strong favorable opinion. The view is advanced that licensing has proved necessary for public health or safety in such businesses or professions as barbers, beauticians, dentists, doctors, lawyers, plumbers, electricians, and others.

"'Are refrigeration contractors, handling equipment possessing potential asphyxiation, explosion, fire, and health hazards, any less important?' is a question often asked. Again, 'What other way is there to assure that installations and service work are done by competent or qualified men to assure safety from all the potential hazards?' 'Could a city inspection department have the manpower, facilities, and time to check the work of many men of doubtful competency?'

"Detroit is the latest city to do this, with its licensing provisions for contractors. It seems to have met with complete favor, both in the industry and among users. The Examining Board states that many men are now getting the practical experience that they should have as employes before going out on their own.

"On licensing, one of the first questions to decide is whether to try for a city or state license regulation or code. There seems to be considerable opinion favoring a state law, because this gives uniformity all through the state. It may be, however, more difficult to obtain than one in a local community where local authorities are often known and can be contacted personally.

"But local codes and licensing may mean considerable variation and confusion in a state, along with local politics mixed in; and, where a firm operates in a number of communities, it means a license has to be obtained in each.

WHERE STATE, CITY CODES CONFLICT

"Under the California state law, a contractor having a state license can operate in any locality in the state, despite any local license regulation. The California Supreme Court upheld this; and just recently, a similar decision was rendered by an Oklahoma district court for the State of Oklahoma."

President Warren Farr of the NARC has appointed a special subcommittee, under NARC's Legislative Committee, to work out a suggested model licensing code for local or state use.

A. C. Ellerbusch of Detroit is chairman, and serving with him are Robert N. Gay, Los Angeles; Don W. Kennedy, Seattle; Joseph Porupsky, Minneapolis; and Henry Wheeler, Chicago.

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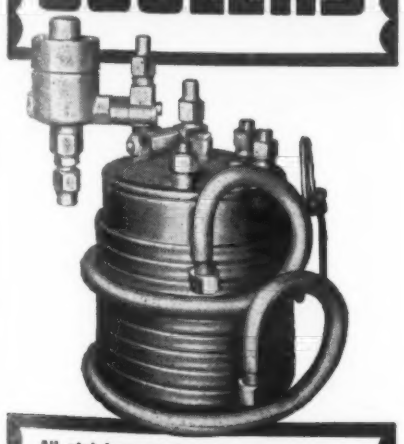
COOLERS



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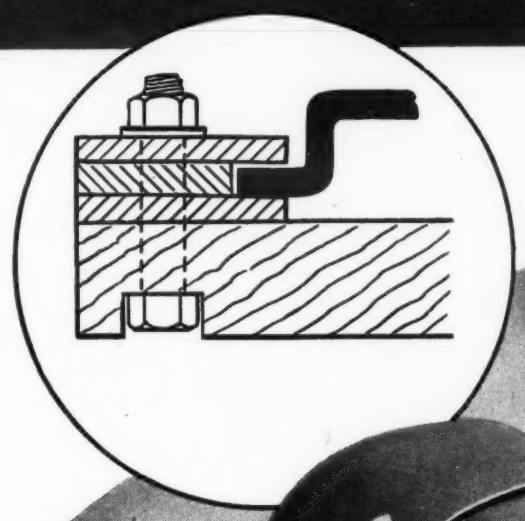

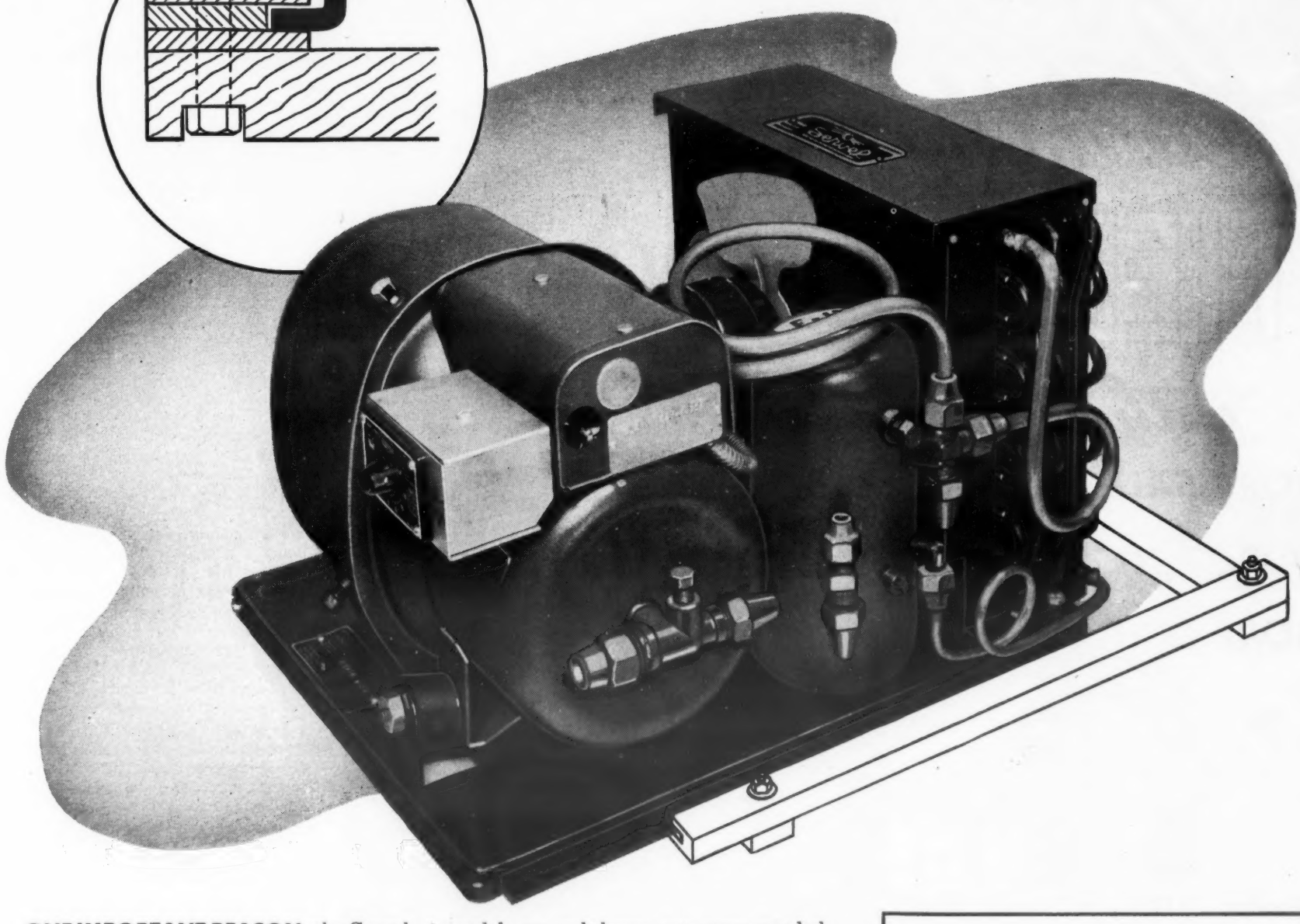

ONE IMPORTANT REASON why Servel Supermetic condensing units are an economical choice for self-contained applications is their specially constructed "pull-out" base. This die-formed rail edge base eliminates the expensive and troublesome problem of rebuilding bases to fit the channel in fixtures.

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Servel's new "Supermetic" condensing units serve dealers and fixture manufacturers in every vital field . . .

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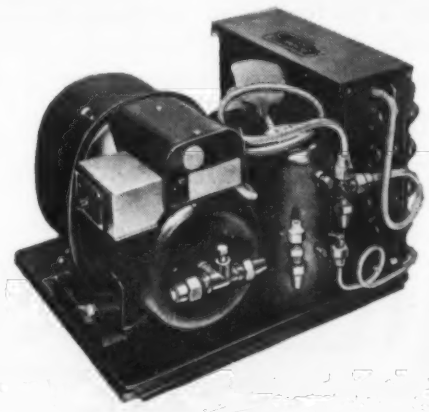
9. INDUSTRIAL COOLING
10. VEHICLE REFRIGERATION



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INSIDE DOPE

by GEORGE F. TAUBENECK

(Concluded from Page 1, Column 1)

ing full tilt, buyers must be *created,* or the entire business system will slow down to a halt.

To create buyers, we must *sell.* We must *tell* people about our product—yes, and even *brag* about it. Otherwise, we'll never keep our factories at work, and eventually all of us will be out of jobs.

Mark our words: selling will soon become the most patriotic, useful, and rewarding endeavor of our times. That is, if we can get anybody interested in selling and merchandising as a profession. The way things stand now, many executives who keep their ears to the ground are truly scared that the present "afraid-to-sell" attitude on the part of some of their representatives and the new people they hire will be hard to overcome.

Too Proud to Sell? Not Us!

We had an example of that "afraid to sell" attitude right here in our own bailiwick not long ago. In the May 12 issue of the NEWS we announced a new book, "One Foot in the Door," in this column, in the editorial, and in an advertisement.

This book, the product of many years of research and many long nights of toil, was presented as one answer to the problem of getting people interested in selling again. It attempted to prove that selling is *fun*—by decorating its tested merchandising principles with laughable illustrative anecdotes.

A few of our good friends, however, thought that this triple-header promotion of a book we had written was "in bad taste." (Maybe they were right at that!) They told us:

"People will resent your blowing your own horn. If the book is good, they'll find out about it and order it."

True, possibly; but that attitude, we submit, is typical of a disease which affects all business today. The if-you-build-a-better-mousetrap people - will - beat - a - path - to - your-doorstep theory was exploded long ago.

If you have something which is novel, unusual, and different—you must put your best foot forward when you introduce it. Otherwise, the naturally conservative people will shy away from it.

Unless you believe implicitly in your product, and say so in no uncertain terms, how can you expect others to part with good money for it? Particularly is that true of a new-and-different item.

(And this book "One Foot in the Door" *is* new and different. It presents tested selling and merchandising principles—many of which old-timers have forgotten, and most of which newcomers have never had to learn—in terms of *humor.* Big idea of this book is to make it *fun to* learn.)

Why shouldn't we try to *sell it,* then, especially when so many people who read advance copies thought it was "just what the doctor ordered" for our industry? If it's good for the industry, the industry should know about it.

We were encouraged by letters such as these, for example:

"Lord knows, all good salesmen can use a refresher course. I am sure you have made a real contribution to specialty selling—particularly, at this time. Too many of the old salesmen have gone soft during the war and have forgotten how to sell, and then there are the newcomers in the selling field who certainly need thought stimulants of this type."—JOHN E. DUBE, General Manager, Alco Valve Co., St. Louis, Mo.

"Your interesting book, 'One Foot in the Door,' reached me yesterday. Although I'm more than usually busy, I took time out to examine the book. As a matter of fact I got so interested that I read quite a bit of it. I think you have done a splendid job and have administered a lot of sound sales instruction in a highly diverting and readable form.

"In the immediate future this trade has got to go back to the methods which you have outlined. A good part of this specialty method is forgotten, and you have done us all a good turn by bringing it to life again."—L. E. MOFFATT, Editor, "Electrical Merchandising."

Fortunately, our immodest ballyhoo for this book is paying off well. Orders are rolling in, and have swamped the shipping department.

Furthermore, the people who read it, apparently get a kick out of it—and learn something, too—because scads of them have taken time out of busy lives to write us and tell us so—and to order extra copies.

Because we honestly believe "One Foot in the Door" will help anyone in our industry maintain and increase his income, and because a lot of readers seem to think so, too, we aren't a bit ashamed to ask for an order. (Send your check for $3.00 *now.*)

British Experiment

One of the most popular men in England today is A. P. Herbert, author, humorist, and Member of Parliament. Recently, in PUNCH magazine, Herbert broke some sharp pentameters against the windmills of Government planning. Excerpt:

Return, Sweet Chaos

Return, sweet Chaos: come, the Bad Old Days
Before the Wise Men watched about our ways,
When Ministers had not annoyed the Sun,
Not much was Planned, but many things were Done . . .
Come, even loathly Private Enterprise . . .

So, gentle Chaos, let me sit and dream
The lost delights of your reviled regime.
One pressed a switch and lo! The Light was found
(Today you would be fined 100 pound).
Water and Gas obeyed the humblest hand,
Though greedy Tories still controlled the land.
Coal, too, almost like water, used to flow,
A commonplace and not a curio.
Coal, Chaos, was as plentiful as hay:
We had so much we went the stuff away!
The Railways, not less rapid then they are,
But much more regular, went just as far.
The Ships, with small assistance from the State,
Sailed around the Planet and returned with Freight . . .
Either by Accident this isle was blessed
Or there was far more planning than we guessed . . .

Thus Bees and Ants about their Business go,
Vague, as it seems, effective, as we know.
Each bee, alone, from Rose to Lily flies,
A wretched piece of Private Enterprise . . .

Begone, Bulk Purchase, heavy-handed hick,
Who still suppose that you can do the Trick.
The nimble thousands, dodging here and there,
Confused the foes and made the Market fair:
But when your tall gross figure comes to town
They all at once combine to do you down.
Begone, Economist: No more profess
To play with Cheeses as you play with Chess . . .
Come, lovely Chaos: come, the Bad Old Days,
Before the Wise Men watched about our ways,
When Ministers had not enraged the Sun,
Not much was Planned but many things were Done.

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MORE SALES
MORE PROFIT
MORE FEATURES

ALWAYS A WINNER

Another ULTRA-COLD entry that is sure to be a top money winner

Adding three more refrigeration units to ULTRA-COLD'S string of thoroughbreds, offers top-notch sales appeal. Only ULTRA-COLD can offer you 30 units to choose from . . . a model and design for all commercial, farm and home freezer use.

Take a tip from past performance, and handle the winning ULTRA-COLD line.

Dealerships in choice territories now available.

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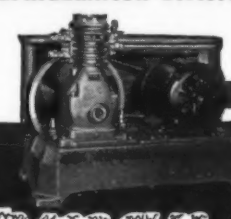

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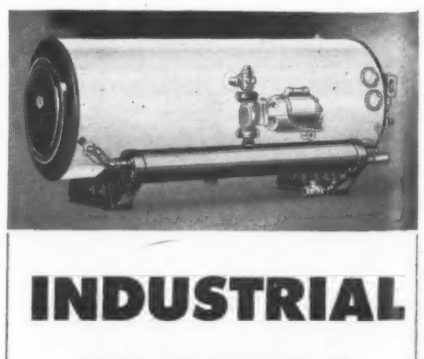

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High suction pressure water coolers ideal for bakery ingredient water and jacket cooling, film processing, bottling plants, etc. Variable ranges of sizes. Low suction pressure for remote installations and cabinet type coolers also available.

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One of the Dresser Industries
MONROVIA, CALIFORNIA
SOLD THROUGH REFRIGERATION WHOLESALERS AND DEALERS

Air Conditioning Saves Dept. Store Thousands Of Dollars by Reducing Damage to Goods

NASHVILLE, Tenn. — Economies running up into thousands of dollars per year have resulted from the combination installation of electronic filtering devices and air conditioning at the Cain-Sloan Co. department store here.

Cain-Sloan has run a four-year test on its 150-ton air conditioning system which reveals such important savings that many other department stores in "smog" ridden communities are planning to adopt the same methods of combatting dirt, heat, and discomfort.

The Nashville department store, doing in excess of 10 million dollars a year in sales, is said to be the first in the country to utilize an air conditioning system completely free of dust through strategically spotted electronic filters.

Location Was Peculiar

Before the installation was made in 1940, the store suffered from Nashville's peculiar location, deep in a valley completely ringed in with hills. This formed an air pocket over the city almost entirely hidden from wind currents, and the huge volume of smoke from Nashville's many soft-coal-burning industries blanketed the city with smog which eventually settled on store merchandise.

So much smoke and dust settled through windows and ventilators prior to 1940 that the store actually had to maintain a full-sized dry cleaning plant to keep expensive apparel, furniture, and materials saleable where they were in stock over long periods. Merchandise became badly soiled not only on display, but in the stockroom. Here, stock employes had to waste valuable hours tightly sealing up newly received merchandise in dustproof paper or cartons, gumming seams together, and using other herculean efforts to protect it.

Some Markdowns Too High

The percentage of markdowns applied to cotton and launderable merchandise which couldn't be dry cleaned was far too high, again directly traceable to the dirt which quickly soiled white shirts, linens, blouses, sweaters, sportswear, etc., and necessitated price reductions to move them.

Total markdown loss was so great that Cain-Sloan found it could easily afford to install a full-scale dry cleaning plant to keep merchandise saleable at its full price.

There were many other disadvantages from smog dirt. The building required twice as long to clean as the average department store, salespeople could not maintain an immaculate appearance, and morale was affected.

Installation of the air conditioning system combined with precipitron filtering has accomplished literally wonders for the store. In 1940, despite the difficulty of conditioning two separate buildings with an exceptionally high summer heat load, the Cain-Sloan management, headed by John H. Duboisson, vice president, determined that it was "high time to do something about it."

When the contractor complained that inside ductwork would take up too much space, interfere with selling departments, etc., a system was worked out whereby extremely heavily insulated ductwork could be run *outside* of the building to cool both structures. Under this novel plan, the main ducts travel of the rear of the six story building, from the basement compressors and mixing chambers, angled into small traffic ducts which carry cooled air into each level.

The main traveler duct then carries over the building roof, dropping down to the top floor of the four-story structure. To insulate these completely-exposed, long-travel ducts, Cain-Sloan constructed them with a two inch heavy cork layer, tightly cemented, and applied over this galvanized metal which reflects away sunlight.

The circulating system was further aided by weather sealing all windows in both buildings, and rejointing sills, door frames, etc., to make the buildings as near as possible an air-tight box.

Ionizer electronic filters "guard" the entire circulation of the 70-75° F. cooled air, at the duct ports, ventilators, grille outlets on the sales floors, and mixing chamber. Electrical equipment installed includes power packs which provide high voltage electrical direct current to the filters, the main control panel, indicator lamps, and safety switches.

The filters are cleaned on a regular schedule, removing huge piles of black, grimy collected soot and dust, checked at the same time for operating efficiency, and otherwise given topnotch treatment.

Results after the system went into action were almost unbelievable. Morale went up, costs went down, and many unsuspected advantages began to show up. These are broken down into many headings, such as the following accrued advantages;

1. *Elimination of costly dry cleaning and markdowns.* Cain-Sloan found immediately that soilage of merchandise formerly dry cleaned was so negligible that it was possible to do away completely with the full-scale dry cleaning plant. Merchandise which once could take only a few days on open display can now be left out indefinitely with only handling soilage to contend with.

Savings Paid for Job

At the same time, other merchandise formerly marked down and sold minus its normal profit began to disappear from the books. Thousands of dollars in direct savings thus appeared from the installation, sufficient to rapidly amortize cost of the original job.

2. *Savings in man hours.* With immaculately clean air passing through stockroom, shipping room, and the salesfloors, the pressure on employes vanished. Now it isn't required that stockroom and sales employes spend a large part of their time sealing up new merchandise on receipt or covering that on display.

This leaves more time free for following up of customers, arranging displays and maintaining department efficiency. The effect on morale is easily seen. There is also a dollars-and-cents value derived from the fact that merchandise need not be handled as often.

Whereas delicate glassware in the china department had to be dusted daily, with resultant breakage from overhauling, one dusting per week is now suffiicient. Toys, china, gifts, pictures, mirrors, lamps, and hundreds of other items which used to invite breakage while dusting remaining bright and sparkling in the clean air.

3. *Elimination of costly redecoration.* Whereas it had been necessary before to resurface walls, paint up and decorate many departments to rid them of infiltering grime, Cain-Sloan has found it possible to get by for as long as four years without such heroics.

During the war, when remodelling was impossible, all of the air-conditioned building remained clean and attractive, with only minor touch-ups and resurfacing. The effect on department efficiency cannot be overemphasized. Whereas customers at one time were likely to comment disparagingly over this and that department's appearance, there are no such remarks to contend with today.

4. *Better window display and removal of loss in display merchandise.* For an unusual note, Cain-Sloan's air conditioning is extended to the display windows. Formerly, window trimmers baking in glass-accentuated heat were likely to soil garments through perspiration on their hands, and delicate merchandise exposed to oven-like heat would fade or lose shape. Now, the cleaned air, cool and pleasant, protects merchandise, while trimmers work at ease, can spend plenty of time on the job and need no "breathers" outside the window on the job.

5. *Reduction in cost of display materials.* Where the store at one time had to replace draperies, display cloths in cases, linens, furniture covers, etc., frequently, it has been found that such delicate items as linen tablecloths, white net hangings, etc., stay clean and neat for weeks at a time before requiring laundering or cleaning. Thus display cloth can undergo many more uses.

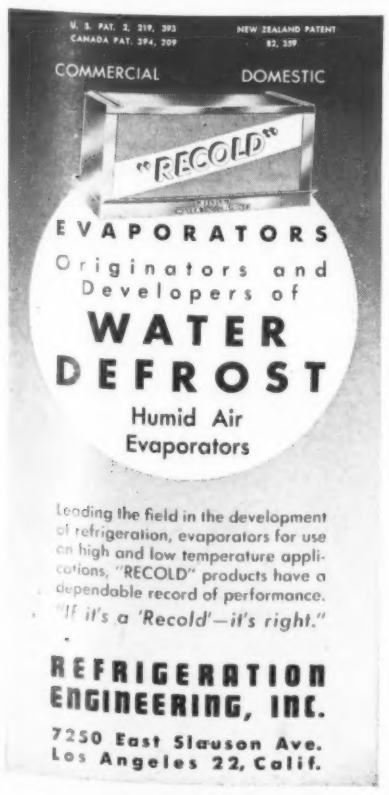
Year-Round System

6. *Elimination of shut-downs.* Unlike other department store systems, Cain-Sloan's air conditioning equipment need not be shut down at intervals while ductwork, grilles, mixing chamber, plenums, etc., undergo cleaning for accumulated dust. All dust is precipitrated out at the filters, except for a minor amount which has no effect on the system.

Thus, the system can be switched over from cooling to ventilating and from there to winter heating with no long delay or expensive channeling into the ducts to make it serviceable.

There are many other benefits realized from the system, such as food appearance, cutting down employes' dry cleaning and laundry bills, customer satisfaction and lighter store cleaning schedules.

What was considered at the outset an expensive experiment has reduced itself to a practical source of operating economy and direct profit after which many other large-scale retailers will model air-conditioning-filtration plants, store officials say.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ROGERS SC-1000
10 TON CAPACITY • SELF-CONTAINED AIR CONDITIONING UNIT
A heavy duty unit for medium sized installations, offering the most in comfort, convenience and economy. Note that narrow width of 30 inches permits free passage through standard doorways. Easily installed.
DELIVERED CHARGED WITH FREON 12 REFRIGERANT.

1 ROGERS CONDITIONERS

SELF-CONTAINED AIR CONDITIONING UNITS

Every day, more and more ROGERS Conditioners are proving their superiority in domestic, commercial and industrial installations. ROGERS Conditioners are completely self-contained and self-operating. Quiet, vibrationless, economical operation and trouble-free, 24 hour a day service, make these conditioners the outstanding value in the air conditioning field. Delivered factory perfect charged with FREON 12 refrigerant.

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ROGERS Conditioners require a minimum of floor space, are easily moved into location without removing door frames or disassembling the conditioner. Installation is quickly performed and inexpensive.

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EASILY TRANSFORMED TO A YEAR ROUND CONDITIONER BY ADDING HEATING COIL AND HUMIDIFIER

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Quiet—Vibrationless
Year Round Conditioning
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Independent control of temperature and humidity.
Dehumidification without refrigeration.
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Requires low-cost standard valves and piping.
Sterilizes room air.

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manufactured in
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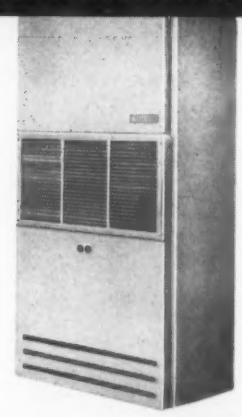

ROGERS SC-500
5 TON CAPACITY SELF-CONTAINED AIR CONDITIONING UNIT
Unexcelled for use in homes, stores and offices. All automatic controls, internal wiring and charge of Freon 12 refrigerant included and shipped from factory.

2 ROGERS SYSTEM OF CHEMICAL DEHUMIDIFICATION

WITH TEG

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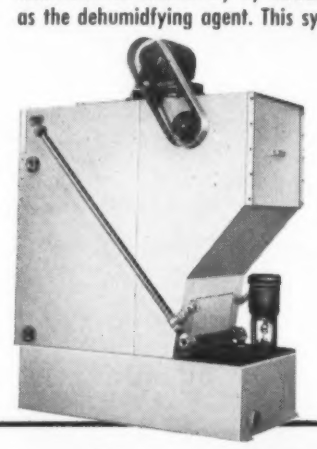

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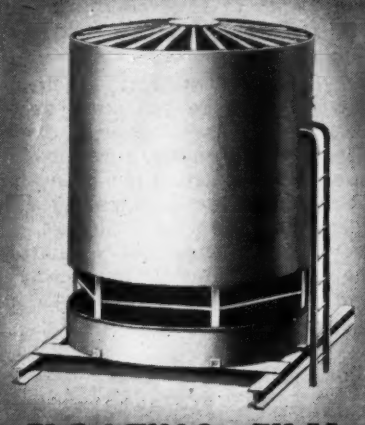

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Foundry Output Up; See Air Cooling as Help During Summer

CHICAGO — Output of foundries throughout the country has been stepped up in the past three months, according to L. E. Roark, executive vice president of the National Founders Association.

Great improvements in year-around production are also in sight, he indicated, thanks to air conditioning which should overcome the normally reduced output in the hot months of June, July, and August.

Air conditioning manufacturers, he said, are now offering equipment which may end this hot weather slow-down.

Despite the present improved overall status, foundries still have backlogs of a year or more on some types of castings, declared Mr. Roark. Gray and malleable iron castings are running 12 to 15 months behind, but orders are beginning to ease. At present steel and non-ferrous foundries report that their load is lightening and they're operating at about 60% to 70% of capacity, he said.

Output per man in foundries has also improved, stated Mr. Roark, who indicated that the trend toward mechanization of processes is growing and will ease the labor situation. Skilled labor is scarce, but increased mechanization permits quick training of ample unskilled help, he said.

On the dark side of the present picture, he cited the decline in quantity and quality of coke and the continued shortage of pig iron.

$12,000 Locker Plant Building Approved

LEMOORE, Calif.—Application to construct a frozen food locker plant at a cost of $12,200 submitted by Cecil Friend here has been approved by the Office of the Housing Expediter. The application was approved on the basis of increasing production or preservation of essential foods or food products.

Missouri House Passes Fair Trade Measure

JEFFERSON CITY, Mo. — Missouri's House of Representatives passed May 21 and sent to the State Senate a fair trade bill which would authorize minimum resale price contracts between manufacturers and retailers of trade-marked commodities.

Under the bill, any persons who sold a protected commodity below a contract price agreed upon between the manufacturer and other retailers would be subject to suit for damages, even though he was unaware of the existence of such a contract.

Rep. John L. Sando, Dunklin Country Democrat, a druggist, who handled the bill on the floor, contended it was needed as a protection to the small merchant and the trade mark owner. He said the bill would protect the little businessman from "unfair competition" of retailers who sold trade-marked brands as "loss leaders" to entice customers into their stores. It would protect the manufacturer against such use of products, he added.

Opponents also charged the bill would have the effect of invalidating the state's anti-trust law. Some attorneys also expressed belief the bill would outlaw trading stamps and trade coupons since it would prohibit the offering or giving of any article of value in connection with the sale of "protected" commodities.

A similar bill was passed last year by the Missouri House but was killed in the State Senate.

Port Authority Requests Barge Terminal Storages

BUFFALO—Establishment of cold storage facilities at Barge Canal terminals is recommended to help stimulate activity on the waterway in a report by a firm of naval architects retained by the Port of New York Authority.

"Every effort should be made to increase the efficiency of the canal through cold storage facilities at principal terminals," said the Authority's report.

Butchers' Early Closing Hours Forcing Stores In Illinois Town To Go 'Self Serve' on Meats

Many Cases, Walk-Ins on Order To Solve Situation

BELLEVILLE, Ill. — Prepackaging of fresh meats which offers the supermarket customer a wide choice of meats after the regular meat markets close at 5:30 appears to be the only solution to maintaining volume in the evening hours, according to some 21 grocery stores and supermarkets in this area.

Six stores are already experimenting with prepackaging fresh meats, which are wrapped in MST cellophane, heat sealed, and displayed either in reach-in or open, self-service refrigerators.

Other stores, lacking sufficient refrigeration, or space in which to install it, are simply warning their customers to get into the store before 5:30 or else "be disappointed."

The Union edict, by which all butchers in the East St. Louis, Collinsville, Belleville, Alton, and Wood River districts must close up shop at 5:30 is definitely affecting sales volume, according to a survey taken among grocers in this section of Illinois.

The worst hardship, it is pointed out, is worked on "working families" in which both husband and wife are employed; neither having any opportunity to purchase meats after arriving home. The 5:30 meat market closing has had the effect of transferring meat purchase over to St. Louis, Mo., across the river, where many customers in this area work.

"Unable to buy meat near their homes, workers in the St. Louis district are dashing to the nearest meat market, and purchasing meat, then buying groceries and staples at their neighborhood stores," one spokesman stated.

Because of the predominant workingman population surrounding the western Illinois grocery stores, almost every store remains open till at least 7:00 o'clock, many of them until 9:00 o'clock. Formerly, meat sales during the period from 5:30 until closing were responsible for a large part of weekly volume.

"Our experience has been that many customers gauge the quality and service of a foods store directly upon the meat obtained there," one Illinois grocer stated. "If we are unable to offer a large percentage of our customers fresh meat, we are bound to suffer."

Of the 21 major stores in the Belleville area, all but one had new refrigerators on order, and most were planning installation of new walk-in boxes, self-serve units, which will make it simple to package large amounts of fresh meats to be sold on a self-service basis.

'Flying' Dealer Uses Own Plane To Cover 17-County Territory

FORT SMITH, Ark. — Charley Buell of Fort Smith, dealer for Carrier air conditioning and refrigeration equipment, is making his customers sit up and take notice by using his own airplane for out-of-town service calls.

Mr. Buell's territory blankets the 17 counties around Fort Smith. He owns and pilots his own Luscombe "Silvaire" plane.

Mr. Buell became a "flying dealer" almost by chance. He got a hurry-up service call by telephone one Sunday afternoon from Harold Dodgens, the Mayor of Ozark, Ark., who also owns and operates a refrigerated locker plant there. Mr. Buell decided he could save time by throwing his tools in the plane.

"We got to Ozark in a comparatively few minutes," Mr. Buell said, "and circled the town in order to signal the Mayor to come out to the airport and pick us up. That's all there was to it, but it proved such a quick and easy way to make out-of-town calls that I decided to make a regular thing of it."

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Use of Retarded Dough Kept In Reach-In Means More Profit on 'Quality' Pastries

Nebraska Bakers Hear Mower Talk on New Trends

OMAHA, Neb.—Expanded production and promotion of Danish pastries made with retarded doughs, which involves the use of refrigerated equipment, was urged upon the Nebraska Master Bakers at their recent convention here, by R. Mower of Swift & Co., in his talk on "New Developments in Plain and Rolled-In Dough and Coffee-Cake."

Mr. Mower told Nebraska bakers that they could boost their profits by producing more rolled-in doughs and sweet goods. These doughs require retardation, which means maintenance of proper refrigeration facilities. New ingredients and machines have been developed which will make these Danish pastries much more uniform and speed up production to compare with the turnout of bread and rolls, he declared.

During the war years, with their shortages and substitutes, sweet goods suffered more in loss of quality than any other bakery product, stated Mr. Mower, but the time is now at hand when the baker can and must convert to prewar quality or better. He urged the bakers to make more Danish pastries of good quality.

These goods, for best quality and saleability, must be mixed cool and kept cool during the rolling-in period, he added, and kept in the refrigerator during the retardation process. Proofing temperature should not exceed 85° F., with just enough humidity to keep from crusting.

Mr. Mower produced data to show that in producing sweet goods from retarded doughs, a lean dough will cost the baker seven and one-half cents per pound at prevailing costs, and nine and one-half cents for rich doughs. While this represents a 31% increase in material cost, the processed rich dough sells for 60 cents a pound while the lean dough sells for 35 cents. In addition, the rich-dough products help the reputation of the bakery and capture repeat business. The speaker concluded that it is not practicable to keep rolled-in doughs in the refrigerator over 24 to 30 hours.

Henry Hansen, sales manager of the Omaha Bakers Supply Co., noted that the installation of retarded dough refrigerators has been growing by leaps and bounds in the Omaha trade area. Listed as purchasing retarded dough boxes just recently were Brownie's Bakery, operated by Herman P. Guyot at Brookings, S. D., four-section refrigerator; Bang's Bakery, John H. and Thomas Bang, Jr., also of Brookings, three-section box; Paul Seiler's Bakery, Indianola, Iowa, three-section aluminum box; Bud Barstad's Bakery, Boone, Iowa, four-section box. These installations all included refrigeration systems.

In addition, the Sunshine Food Markets of Sioux Falls, S. D., just recently installed a large fermentation room unit with water cool coil, and a circulating pump for the unit.

Farr To Meet with 4 West Coast Contractor Groups June 11-16

CLEVELAND — Warren W. Farr, president of the National Association of Refrigeration Contractors, will be the guest speaker in June at meetings of the west coast associations affiliated with NARC.

On Wednesday, June 11, Mr. Farr will address a joint dinner meeting in Los Angeles, of the San Diego and Los Angeles refrigeration contractors associations. The combined membership of the two groups is 125; and in addition to the membership, it is expected that refrigeration contractors from all over the southern part of the state will be present.

Mr. Farr will then fly to Portland, Ore., for a meeting Thursday, June 12 at Berg's Chalet with the new Refrigeration Contractors Association of Oregon. This will be the first all-state meeting of this group; and special efforts are being made to have refrigeration contractors present from all over the state. While in Portland, Mr. Farr may also hold a luncheon meeting on Friday, June 13 with the directors of the association.

On June 14 he will participate in an all-day state meeting in Seattle, of the Refrigeration Contractors Association of Washington. There will be a luncheon meeting at noon and a dinner-dance in the evening. This organization is divided into five state regions, and an excellent turnout is promised from each of the regions.

From Seattle Mr. Farr will fly to San Francisco for a meeting Monday, June 16, with the Refrigeration Contractors Association of Northern California. He will meet with the officers and directors at luncheon in the Whitcomb hotel and a dinner meeting in the evening of the full association at the Derby Club. This Northern California group covers a radius of 50 miles from San Francisco, has a membership of 125, and expects a strong turnout from this area.

The purpose of these meetings is to permit the local associations to meet personally with NARC's first president; to hear first-hand the specific ways in which NARC is meeting the industry's problems and striving to protect and promote the business; also to permit Mr. Farr to get a personal picture of the problems and thinking of these affiliated associations, so that the national association may have more complete and more specific information to use as a guide in its work for the industry.

Flying back from San Francisco to Cleveland, Mr. Farr plans to stop off in Salt Lake City to discuss refrigeration contracting problems with NARC member Ralph Baker and several other refrigeration contractors that Mr. Baker will call in for an informal conference, it has been reported.

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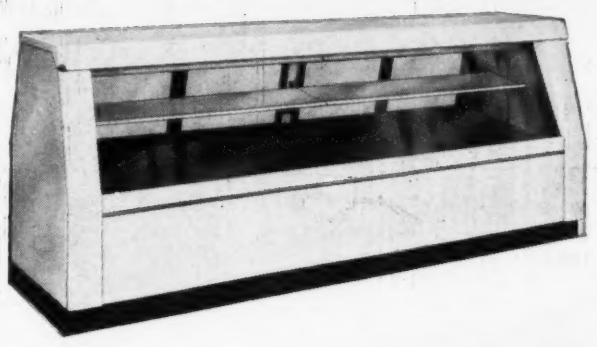

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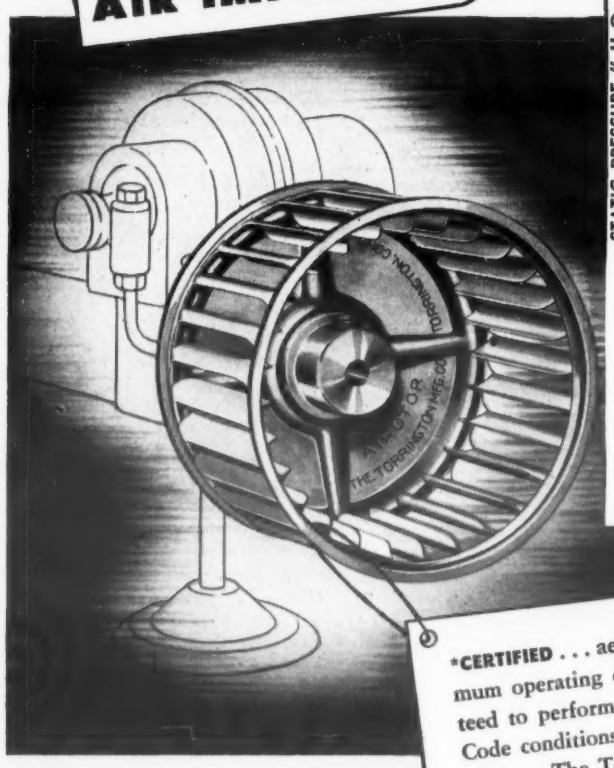

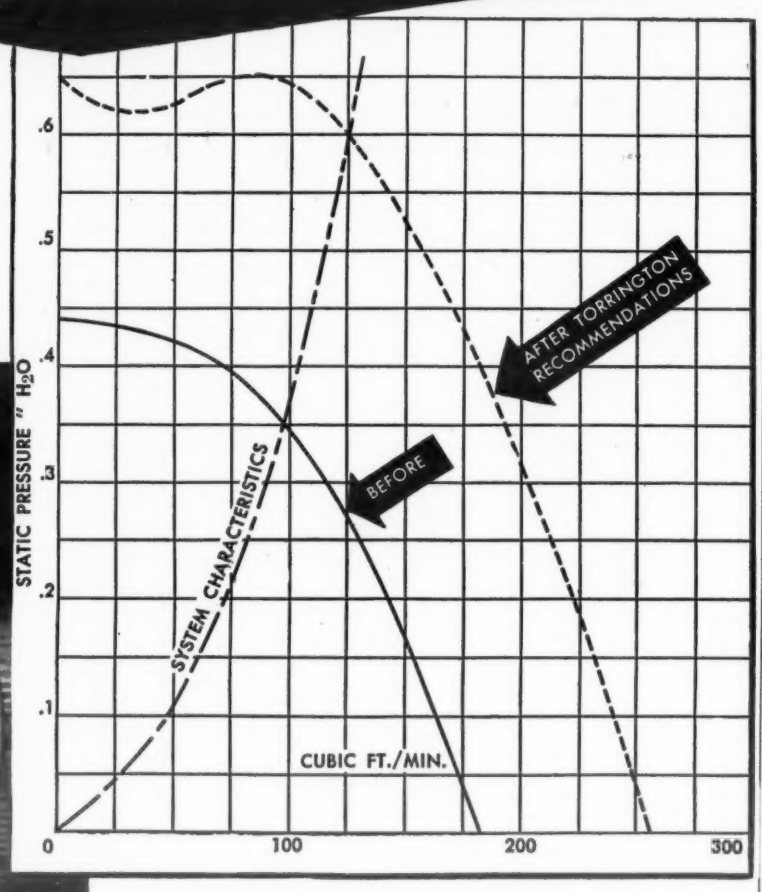

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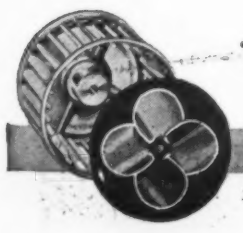

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Mr. Truman: Please Note

THAT unwholesome national legislative ogre, the Wagner Act, is devouring too many small businesses nowadays—and, in the process, its iniquities may sponsor unemployment.

What's more, this decidedly illogical state-of-affairs shows signs of becoming a major cause for national alarm. Unless President Truman acts like a statesman instead of a politician—and signs the new labor bill passed by Congress—more and more small firms may fail.

When we note that large numbers of small business enterprises—upset and hamstrung by organized labor in their attempts to carve out a precarious foothold on the nation's economic facade—are forced to close their doors because they can't cope with labor union "feather-bedding" stipulations, it's time that President Truman, like most of the citizens he governs, takes a second look at what the Wagner Act does to "little people."

Under the provisions of the Wagner Act, any employer is denied the right to talk to his employes directly. He can't tell them the true status of his business affairs. He is allowed to talk only to the union's appointed professionals. So it happens that union members seldom learn the facts. Their representative passes on to them only those rumors and suppositions which suits the union's purposes. If their employer is about to go broke, they'll never hear about it. And so, much to their surprise, they may join the Army of the Unemployed shortly after they win a new contract.

To add to the confusion, most individual workers in this day-and-age are unable to act individually. They are required to become union members in order to retain their jobs. And, as such, they are unable to obtain a true slant on existing conditions—because their union bosses conceal knowledge and information which might undermine their hold on their members if "it ever got out."

The small businessman, who is unable to meet the big corporation level of union-established wages and feather-bedding "make work" conditions, often is forced to close down his entire operation without ever having the opportunity to explain his unfortunate dilemma to any of his employes in advance.

As the Wagner Act stands now, whenever a business man attempts to talk frankly with his employes—to tell them how he stands now and something about his future prospects—he may be accused by the National Labor Relations Board of an "unfair labor practice" and will be headlined in the newspapers as being an intimidator of defenseless workers.

That will fix him for sure. If anyone applies for employment at his place of business thereafter, it will happen only because the applicant can't read, see, or hear.

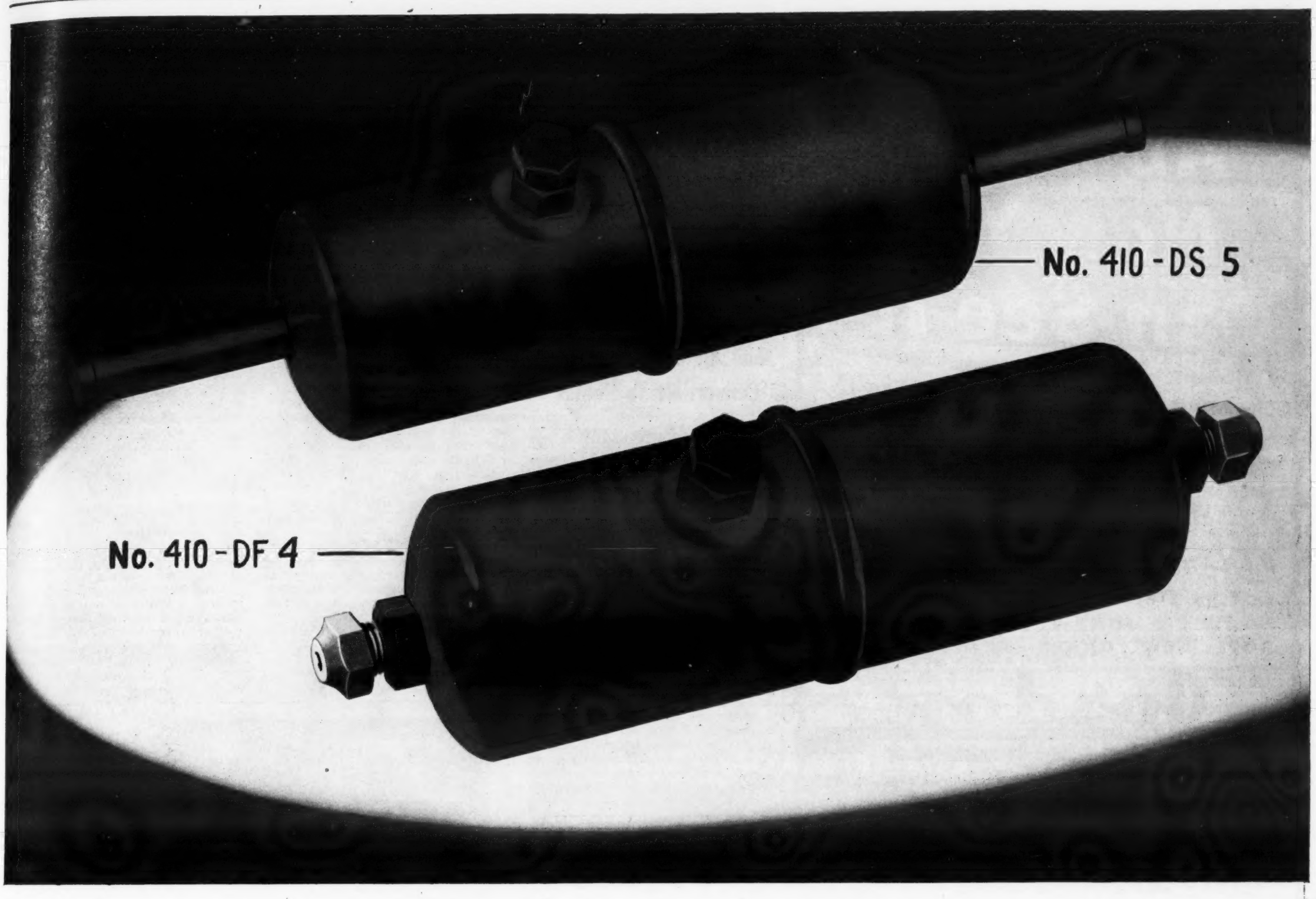
We don't want to be mean about this, nor do we like being tagged as a Tory or a Reactionist. Nevertheless, as an honest reporter, we must declare that when labor unions insist upon wage rates or "loaf, brother" conditions which devastate small, "shoestring" businesses, they are forcing unemployment on their own members.

One unfortunate result of the Wagner Act, as it stands now, is that it thwarts competition by forcing the small businessman to compete on even terms with well-heeled, long-established, gigantic corporations.

Because the costs of small business enterprises usually are so much greater than those of the entrenched corporate giant (in relation to their comparative sales volumes) the "little fellow" often is unable to survive when the labor unions with which the latter must deal insist upon an industry-wide, across-the-boards settlement.

The employer and employe are prevented by the Wagner Act from working out their differences between themselves. They must negotiate either through a biased "middle man," or through a Civil Service bureaucrat.

The only solution to this problem is to write letters to Truman pointing out the hardships which this un-American statute works upon "small business." Let's amend and vitiate the Wagner Act!



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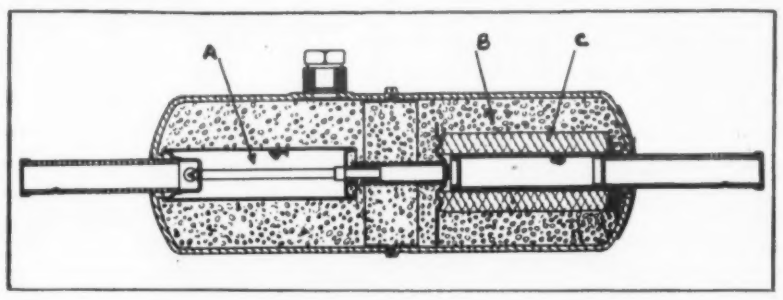
Drying agent may be removed and replaced, or dried out and re-used.

• Installed on your larger refrigeration systems, this new larger capacity TRAP-DRI means improved operation, savings in service time, greater satisfaction and cost-savings for your customers. You'll find them at leading refrigeration parts jobbers — or write for latest bulletin.



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Cross section of new 3-ton A-P TRAP-DRI showing: (A) Screen at inlet diffuses refrigerant into Silica Gel; (B) Silica Gel drying agent; (C) Honey comb filter element traps impurities as small as 5 microns, by depth filteration principle.

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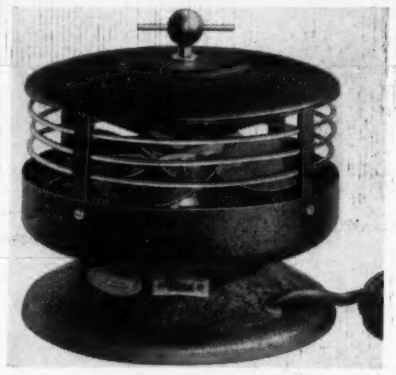


* * *

New Air Circulator Is Convertible to Heater

CHICAGO—A new type combination heater and air circulator, which has a heating element of radial wire coils mounted beneath a horizontal six bladed fan, is now being produced by Howard Industries here.

The 7¾ in. fan, powered by an E-M-C No. 800 fractional hp. motor, can be operated with the heating element to circulate warm air or without it to circulate cool air, according to the company.

When the heating element is energized, Mr. Howard said, the fan's speed is reduced. Operation is controlled by a toggle switch on the base.

A cone shaped top deflector is claimed to be scientifically curved to give maximum effective distribution to heated or cool air.

The entire unit measures 10½ in. in height by 10½ in. in diameter. It has a chrome trimmed heating element enclosure and circular guard wires. For convenience in carrying, there is a chrome plated handle at the top.

Sectional Walk-Ins Made of Aluminum

PHILADELPHIA—A new line of sectional aluminum walk-in coolers and a new model packaged refrigeration system have been announced by the Refrigeration Engineering Corp. here.

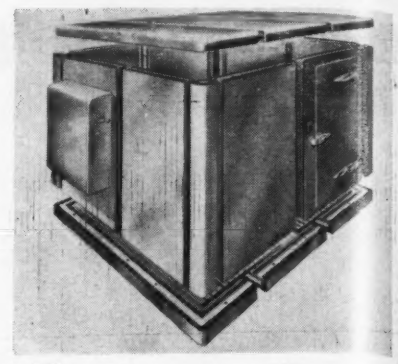
Production on these units has already begun and shipments are expected to start on or about June 15, the company said.

The sectional coolers, labeled RECO-FAB, will supplant the Steel Clad coolers formerly manufactured by Refrigeration Engineering Corp., according to company officials.

Designed for low and medium temperature storage, they will be produced in two widths. The Eighty series will be made in an 8 ft. 6 in. width, in sizes from 192 cu. ft. to 1,420 cu. ft. The One Twenty series will be manufactured in a 12 ft. 1 in. width, in sizes ranging from 287 cu. ft. to 3,360 cu. ft. capacity, the company declared.

The sections comprising the cooler are constructed on a hardwood framework, treated with waterproof and rotproof compound, according to the company. They are insulated with 6 in. of Fiberglas, sealed with vaporproof barrier, and clad in sheet aluminum.

The coolers are said to be so light that any single panel can be lifted easily by two men.



This shows how the Reco aluminum sectional cooler is put together.

Adjustable insulated partitions are furnished with the coolers so that compartments can be set up within the box and maintained at different temperatures, ranging as low as -10° F., the manufacturer asserted.

Door panels are standard width and can be placed anywhere around the box. Corner sections are separate from the regular panels and are rounded on a ½ in. radius to give the unit a streamlined appearance, he explained.

Panels comprising the cooler are assembled by means of lag and pod connections.

The new model Reco-Pak packaged refrigeration system is equipped with the Recomatic automatic defrost system, Refrigeration Engineering Corp. officials said.

Available in 1½ and 2 hp. sizes, it consists of motor, compressor, blower coil, automatic defrost device, distant reading thermometer, high and low pressure gauges, and adjustable thermostatic control, all mounted in one integral unit ready to be bolted to the cooler and connected.

This is the 7-cu. ft. two-temperature refrigerator which Westinghouse is now introducing. The freeze chest compartment across the top holds 43 pounds of frozen foods, and an additional 13 pounds can be stored in the ice storage tray immediately below it. Temperatures in the normal food storage compartment are controlled by a baffle arrangement.

* * *

New Two-Temperature Westinghouse Model

(Concluded from Page 1)

lower compartment. This damper is automatically opened when room temperature rises, and closed when room temperature falls, Westinghouse explains, adding that this arrangement eliminates the need for a secondary refrigerant circuit.

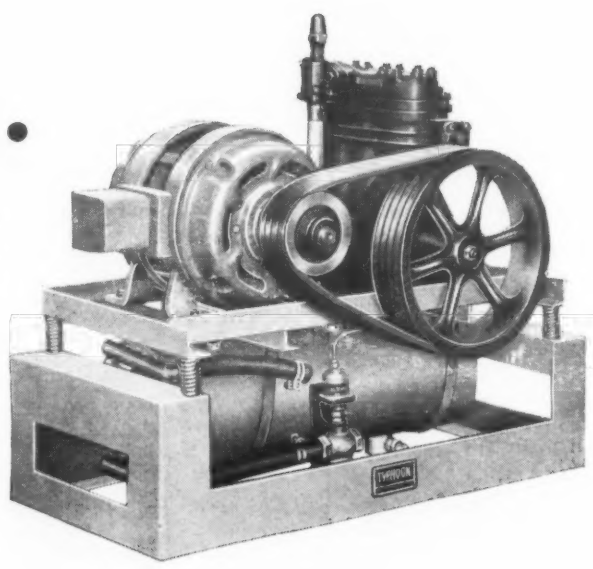
Normal setting of the control provides an air temperature of 5° to 7° F. in the freeze chest with a plate temperature of 0°, the company claims.

The new model measures 30¼ in. wide, 57⅝ in. high, and 25¾ in. deep, the Dulux finished cabinet being of all steel welded construction. Food liner is white porcelain on steel with acid-resisting bottom; shelves are of heavy, rust-resistant wire. Interior is framed in a new color trim called "Apricream."

Two 14-cube "Select-O-Cube" ice trays, two 14-cube "Handi-Out" plastic grid trays, a utility tray, and two "Humidrawer" vegetable crispers are included in this model. Flexible arrangements of the main food compartment permit storage of large items.

More Business for TYPHOON Dealers with New High-Side, Low-Side Assemblies

NOW TYPHOON dealers step up sales by offering their customers a more complete air conditioning service. Separate high-side, low-side assemblies mean added business, open another source of air conditioning profits. By the makers of the superb PROP-R-TEMP self-contained units.



LOW-SIDE Assembly

Adaptable for use as a central plant or a unit system with any type of condensing unit. Made with two coil sizes and three fan motor sizes for units of three, five and seven ton capacity. Complete with filters and multi-outlet expansion valve. Removable front panel and two-way directional grill. Insulated against condensation and refrigeration loss. 35" wide x 19⅜" deep x 57" high.

HIGH-SIDE Assembly

"Floating power" suspension spring base absorbs all vibration, eliminates need for cork pads, rubber blocks. Available in three to fifteen ton sizes. Complete with compressor, flywheel, V belt, drive, line valves, all copper condenser, receiver, ball-bearing motor dual pressure control, water regulator, valve and belt guard.

More than 30 years of air conditioning experience are embodied in all TYPHOON products.

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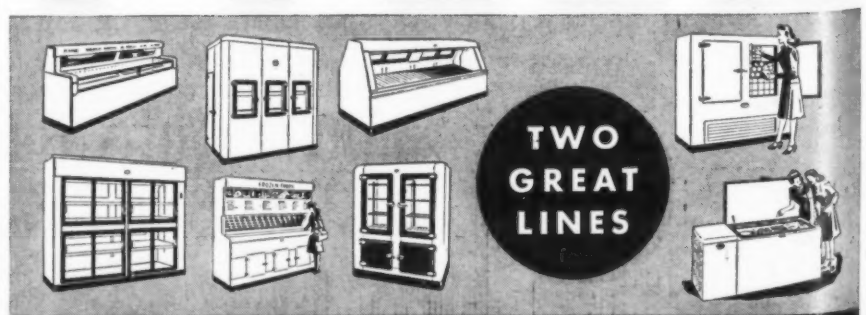

TYLER COMMERCIAL REFRIGERATORS • HARDER-FREEZ HOME LOCKERS

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What's New (Cont.)

Halstead & Mitchell Makes New 2-Stage Condenser

Byron Halstead (left) explains new unit to Hugo Smith, new North Central states representative.

PITTSBURGH — Production; in certain sizes, of a new two-stage double-tube counterflow refrigeration condenser has been announced recently by Halstead & Mitchell here.

These new two-stage condensers incorporate the same cleanable feature which has been a characteristic of the regular Halstead & Mitchell line.

Through the adaptation of the two-stage principle, a greater concentration of water tube copper surface is achieved, and improved velocity characteristics in the refrigerant passages are realized by increasing water tube size in the lower portion of the unit, the manufacturer of these condensers claims.

Gibson Models--

(Concluded from Page 1)

ing coils surround the Freez'r Locker on all sides, top, and bottom.

All models further include such features as a 15-position cold control, glass shelves, moist cold drawer, seamless and crackless all porcelain interior, ice cube trays with ejecting lever, and a non-refrigerated dry storage bin at the bottom, which is claimed to hold more than a bushel of dry cereals, crackers, etc.

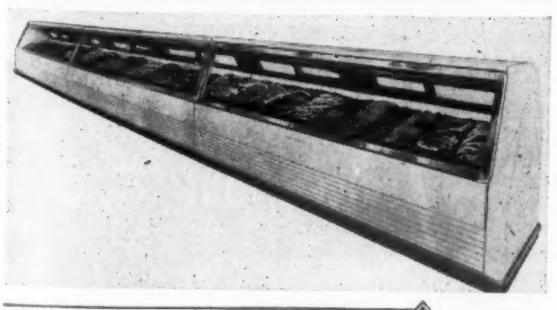
Gibson Model SF-797

Differences between the models lie in the amount and arrangement of shelf space. The SF-797 has 14.4 sq. ft. of shelf area, the F-787 has 13.9 sq. ft., and the F-777 has 11.5 sq. ft.

The SF-797 has an enclosed Fresh'ner Locker just below the freezer compartment, while the other two models have an open Fresh'ner Shelf in that position. These features are said to produce high humidity and low temperature for retaining freshness in foods stored there.

The SF-797 has actually 7.2 cu. ft. of storage space while the others have 7.0 cu. ft.

Hussmann Introduces 'Endless Design' Display Case



ST. LOUIS—A continuous display meat case of "endless design" has been introduced by Hussmann Refrigeration, Inc. here.

Multiples of two or more cases can be readily joined together affording clear unrestricted vision of all the meat on display from front to back and from end to end, no matter how many units are in the installation, the company explains.

Door openings at the rear of the cases and the placement of coils, baffles, etc., are said to provide maximum freedom and working accessibility for the butcher.

Known as the Model CT case, the unit is fully protected by patents granted or pending, according to Hussmann.

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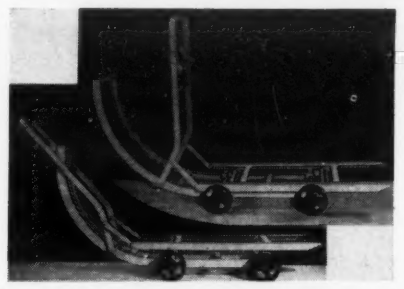


* * *

Arcade Hand-Lift Truck Has Capacity of 1 Ton

FREEPORT, Ill. — A new light hand-lift truck, designed to handle loads up to one ton for short moves around a factory, warehouse, or transfer depot, has been announced by the Arcade Mfg. division of the Rockwell Mfg. Co. here.

Overall length of the truck is 70 in. Platform area is 11¾ in. x 43 in., the manufacturer said.

Reconditioned Refrigerators Move Slowly In Atlanta

ATLANTA—Sales of reconditioned electric refrigerators are reported as being "extremely slow" by several independent major appliance shops here. The boxes being offered are of the small 4 and 5-cu. ft. size.

It has been found in all cases that customers believe the price for such boxes is too high, and that the resale value or trade-in allowance of the refrigerators is practically nil because due to their size they are only suited for very small apartments.

Using 'Codisco' Lift Jack, 1 Man Can Raise 1,000 lbs.

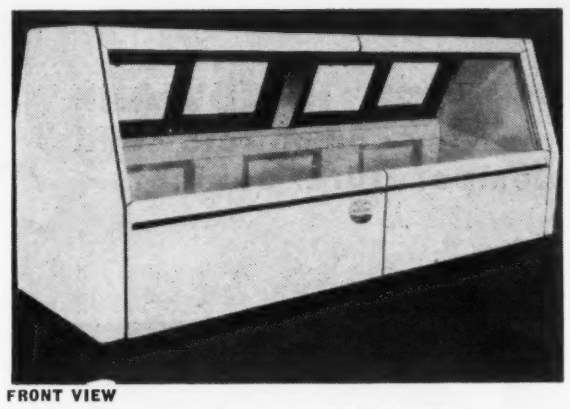
SALT LAKE CITY—Claimed to permit one man to lift 1,000 lbs. as much as 11 in. off the floor, a lifting jack is being marketed by Commercial Distributing Co., parts wholesaler here, under the trade name "Codisco."

The jack consists of a straight-grain, hard maple handle about 4 ft. long fitted with a heavy steel nose piece and a semi-circular welded roller assembly. Four steel rollers are mounted in the assembly framework. The rollers, it is claimed, not only facilitate the lifting, but also permit the jack to be used as a roller for one end of the equipment, it is reported.

With the jack, heavy equipment can also be lifted up high enough to be placed on standard rollers or dollies, the company says.

BUTCHER DOUBLE DUTY DISPLAY CASE

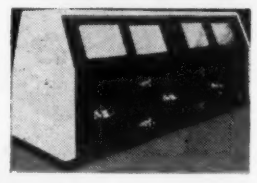
STREAMLINED! EFFICIENT!
MODEL P.M.D.D. — REMOTE:



FRONT VIEW

DOUBLE Duty, Streamlined Case. Porcelain exterior—Stainless Steel interior. Equipped with coils, top and bottom. Fluorescent wired. Tinned wire racks. Glazed sliding doors in hard rubber frames on hard rubber rails. Hinged doors on bottom. Chrome plated hardware. Triple glass front.

REAR VIEW



Also Delicatessen Cases and All-Vision Cases.
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PHOTOGRAPHS OF OUR STAINLESS STEEL CASES ON REQUEST.

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File this return with Collector of Internal Revenue on or before March 15, 19
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FORM 1040
Treasury Department
Internal

U. S. INDIVIDUAL INCOME TAX RETUR
FOR CALENDAR YEAR 1946

beginning ----------, 1946, and ending ----------

ES.—Instead of this form, you may use your Withholding Statement, Form W-2,
r total income was less than $5,000, consisting wholly of wages shown on Withi
r of such wages and not more than $100 of other wages, dividends, and in

PLEASE PRINT. If this return is for a husband and wife, use both first nam

(PLEASE PRINT. Street and number or rural route)

(City or town, postal zone number)

Occupation

(County)

(State

List your own na

Social Security No.

NEXT YEAR... PAY A BIGGER TAX with CASH!

Are you like most Americans, working all year to make a good living and then griping about the income tax that must be paid? But, down deep in your heart—you'd probably like to a pay a bigger tax—providing you made more net income. And that's exactly what you can do in selling Hudson Constant Pressure Carbonators. You'll sell more carbonators, make more profits, pay a bigger tax. Sound interesting?—Then get all the details NOW!

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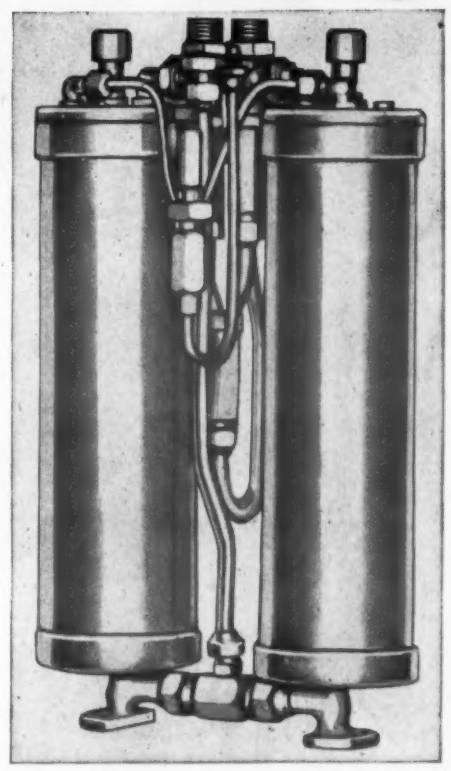
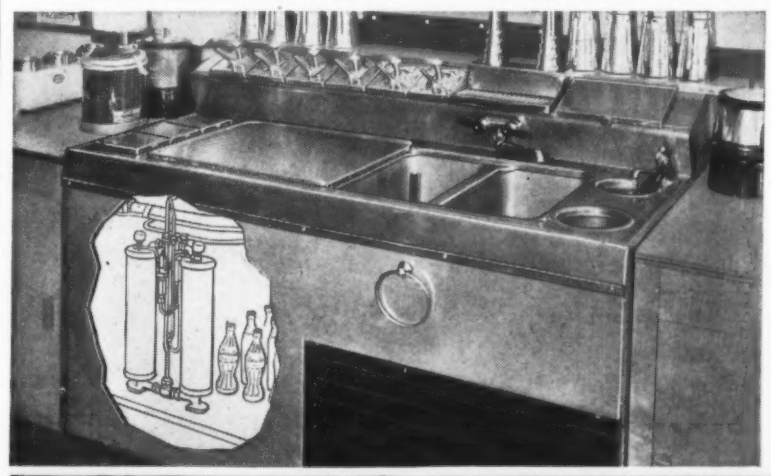
Sales are easy when you show them how they can replace their old and inefficient equipment. Small and compact, it is only 3¾" x 16¾" x 9¾" and weighs only 17 pounds.

Hudson Constant Pressure Carbonators are guaranteed for 10 years. Only a product that is mechanically perfect, dependable and trouble free could carry such a guarantee. That's another important reason why Hudson Constant Pressure Carbonators are easier to sell.





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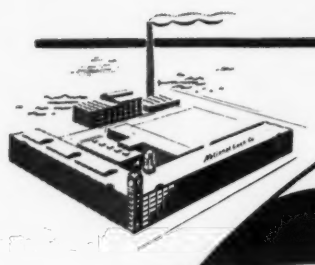

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FCA Reports on Nation's Locker Plants

8,000 Plants Served 3,300,000 Families To Mid '46, Survey Finds

WASHINGTON, D. C.—A total of 8,000 frozen food locker plants were serving approximately 3,300,000 families, or over 13,000,000 persons, in the United States on July 1, 1946, the Farm Credit Administration estimated recently.

The FCA based its figures on a survey conducted by its cooperative research and service division and reported upon by L. B. Mann and Paul C. Wilkins, agricultural economists.

These plants have an estimated combined capacity of some 4,000,000 lockers and store about 1,400,000,000 lbs. of food per year, of which some 90% is meat and poultry, the FCA survey indicated.

Average plant capacity, that is, the number of lockers a plant can hold, increased from 328 lockers on Jan. 1, 1941, to 500 on Jan. 1, 1946, or 52%, the survey showed.

Plants in the North Atlantic states (New England and the coastal states lying north of Maryland) were larger and those in the North Central area (from Ohio to Kansas and northward) were smaller, on the average, it reported.

Data for the FCA report, which has been compiled every year since 1940, was gathered from questionnaires sent to locker plant operators early last year. Of the 7,000 questionnaires mailed, 3,000 were returned. Of these, 2,882 provided enough information to be used in the analysis, the authors said. The usable questionnaires represented 41% of the 7,000 locker plants known to be operating on Jan. 1, 1946, they added.

Table I

Type of Affiliation	Plants Reporting	Average Locker Capacity Plants	Average Lockers Installed	Average Lockers Rented	Percentage Lockers Rented of Locker Capacity	Percentage Lockers Rented of Lockers Installed
Meat market or grocery	1,007	362	341	336	93	99
Ice or cold storage	455	742	682	676	91	99
Dairy plants	298	419	408	404	97	99
Other enterprises	279	537	504	495	92	98
Not affiliated	822	552	523	513	93	98
Total or average	2,861	500	470	464	93	99

Commenting on the relative size of plants in the different sections of the country, the report said:

"From a historical point of view the larger locker plants have been located in the North Atlantic states. In this region a large portion of the plants are affiliated with ice and cold storage concerns where considerable insulated and refrigerated space is available for ready expansion of locker facilities.

Affiliated Plants Are Larger

"The average plant capacity of all locker plants in this region was 654 lockers. Those plants affiliated with ice and cold storage companies averaged space for 955 lockers.

"In the Western states (the 11 lying west of the great plains) also the locker plants are larger than average. Plants from this region reported average capacity for 580 lockers; California, Nevada, Utah reported over 700.

"Two conditions are believed responsible for the larger than average size: first, many plants are affiliated with ice and cold storage companies and thus could expand rapidly to meet the increased demand for locker storage service; second, consumers in western cities have been more inclined to use lockers than those living in other cities."

Digging into the affiliation of locker plants, the survey disclosed that approximately 35% of all plants were affiliated with meat markets and grocery stores, 16% with ice and cold storage concerns, 10% with dairy plants, 10% with other enterprises, and 29% were not affiliated with any other enterprise. (See Table I.)

Comparing this data with previous figures, the researchers noted a 60% increase in the proportion of non-affiliated plants within the three years, 1943 to 1946.

Almost 50% Individually Owned

This trend toward non-affiliated plants, they concluded, "is partly explained by increased confidence in the stability of the industry and by the degree to which it is considered an individual industry, distinct from other types of business and requiring specialized skills and knowledge for successful operation."

Inquiring further into the ownership of locker plants, whether by individuals, cooperatives, partnerships, or corporations, the survey found that slightly less than half of the 2,882 plants reporting were owned by individuals.

Partnerships owned 22%, corporations owned about 16%, and cooperatives owned nearly 13%.

Compared with the figures as of Jan. 1, 1943, individual ownership showed a 6% drop, partnerships a 4% increase, cooperatives a 3% increase, and corporations a 1% decline.

Despite these figures, however, the authors of the report declared, "it is reasonable to assume that . . . corporate ownership will increase as the cost and size of locker plants increase.

"This form of organization lends itself to the handling of large amounts of capital necessary for present day large scale operations. Cooperatives also are likely to grow in relation to other groups as they, too, are so organized as to provide capital to meet increasing investment requirements."

Data as to when these plants were opened indicated that 50% of all plants opened before 1936 were owned by corporations. Since that time, however, the percentage has dropped until only 10% of the plants in 1945 were corporate owned.

Table II shows the year of opening of the 2,882 plants reporting.

It was noted also that the largest capacity plants are owned by corporations. Average capacity for corporation owned plants was 728 lockers in 1946. For partners, it was 533 lockers; for individuals 429; and for cooperatives 422.

On the utilization of storage space within the locker plant, the survey discovered that 93% of all zero-temperature space in locker plants is occupied by rented lockers as compared with 64% in 1941 and 89% in 1943.

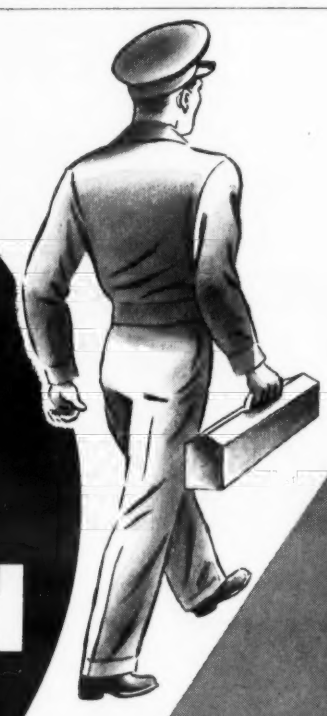
The increase in percentage rented shows the greater utilization of zero-temperature space for locker storage service, it said. It noted that, as a corollary to this increase

(Continued on next page)

Table II

Year of Opening	Plants Reporting
1935 and prior	152
1936	126
1937	162
1938	249
1939	298
1940	398
1941	305
1942	202
1943	137
1944	404
1945	449
Total	2,882

THE SATISFACTION LINGERS ON... WITH HUSSMANN EQUIPMENT



A good Refrigeration Man puts his best, sincerest effort into every job. Then, when he's finished, he goes on his way—entrusting his reputation to the performance of the Equipment.

The high quality construction and scientific engineering built right into every HUSSMANN Product assure satisfactory performance! HUSSMANN won't let you down!

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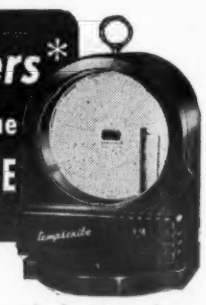

The TEMPSCRIBE Recorder is outstanding for its universality. Any TEMPSCRIBE can be quickly converted from temperature recording to time-operation recording simply by changing the door of the instrument. A widely-used combination comprises one clock case (having a 24-hour spring-wound movement) and two doors (one with a bi-metallic temperature element, and one with mechanism for recording motor on-and-off time). This economical set costs very much less than a dual recorder. Even two complete TEMPSCRIBES, to obtain simultaneous records of temperature and motor operation, cost no more than you would normally expect to pay for a single instrument that makes dual records, yet give you all the advantages of two separate instruments!

Bul. 704 gives list of ranges, practical application data, and complete details.

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Locker Industry Remains Primarily Rural, 73% of Patrons Are Farmers, Figures Show

(Continued from preceding page)

in locker space, there is a decline in space available for bulk storage rental service.

However, it is estimated that the bulk zero storage space available averages 420 cu. ft. per plant. This amounts to space sufficient to store approximately 4 tons of meats, fruits, and vegetables if 75% can be considered effective piling space, the survey declared.

The use of bulk storage space is quite flexible or elastic compared with the use of lockers, it said. When bulk storage is properly operated, the turn-over may be fast and the income substantial, while the income from lockers is fixed for the year.

The survey found that 73% of all locker plant patrons are farmers.

"Since the first locker plant survey by the FCA in January, 1940, less than 3% change has occurred in the relationship of farm and non-farm patronage," it stated. The average number of locker patrons on Jan. 1, 1946 was 414, of which 301 were classed as farm patrons and 113 as city or town patrons.

"Despite the increased number of city plants, the locker industry is still primarily a rural industry, serving rural people," the survey asserted.

Only when locker plants are located in towns of 25,000 population and greater, and very few of them are, does the percentage of town patrons exceed 50%. And, the survey noted, the half way mark, on the average, was passed only in the Western and Southern states.

Contrary to the belief of many observers, who report that the present trend in locker plants is toward urban centers, the survey indicated that the shift is rather to towns of less than 5,000 population.

"It is true that many plants are now being built in the larger cities and towns," Messrs. Mann and Wilkins wrote, "but the results of this survey indicate that their number is still relatively small when compared with the number of plants being built in the rural towns.

Building Greatest In Villages

"The survey shows that 83% of all plants opened in 1945 were in towns of under 5,000 population, while in 1943 only 62% were opened in towns of such size.

"With the exception of one year since 1935, the great majority of the plants have been built in rural towns of less than 5,000. Prior to that date half of the plants were in towns of over 5,000; then the trend quickly turned to rural areas except in 1943 when 38% of the plants were constructed in towns of over 5,000 population. Since that year the trend is again toward the smaller towns."

For the percentage of plants of specified locker capacity operating in towns of various size, see Table III.

Products processed by the plants reporting as of Jan. 1, 1946, according to the survey, averaged 353 lbs. per locker, compared with 382 lbs. for 1942.

This volume consisted of: beef, 163 lbs.; pork 135 lbs.; lamb, 4 lbs.; poultry, 15 lbs.; game, 12 lbs.; fruits, 13 lbs.; and vegetables, 11 lbs.

Pork cured averaged 65 lbs. per locker, compared with 46 lbs. for 1942.

By weight, beef exceeded all other products. Pork was second except in the South Atlantic states (including all coastal states from Maryland south and West Virginia) where it ranked first.

Commercially processed food sold by locker plants increased over 1942 except for packer beef and pork, which declined sharply.

Locally processed vegetables and fruits sold by locker plants increased from 10 lbs. per locker in 1942 to 26 in 1945, the survey said.

Locker Service on Upgrade

The survey asserted that 87% of all plants reporting customarily chill, cut, wrap, grind, and freeze meat for patrons. This percentage varied, it noted, from 76% in the West to 95% in the South Atlantic states. It represented substantial increases in such services, particularly in the West and in the North Atlantic states, it said.

Curing of pork was reported by 42% of the plants, compared with 39% in 1943. Plants in the South Atlantic area led with 64%, while the West showed only 29%. North Atlantic plants reported an increase from 14 to 43%.

Noting an increase in custom slaughtering by locker plants, the survey declared that 37% of the plants reporting provided slaughter at the plant, on the farm, or elsewhere. Twenty-two per cent slaughtered at the plant, compared with 19% in 1943 and 5% in 1940.

Of the plants reporting, 17% dressed poultry at the plant. This national average spread from 30% in the South Central (8 states from Alabama to Texas) and South Atlantic states to 8% in the Western states.

"Average rental rates and processing charges increased even during the war period," the survey stated. "Though many older plants had rates frozen by OPA regulations, plants opened in new areas were able to set charges at substantially higher rates.

"Rental rates averaged $11.38 per locker on Jan. 1, 1946, and $10.13 for 1943, $9.86 for 1942, and $9.76 for 1941. They were lowest in the West ($10.75 per locker) and highest in the South Atlantic states ($13.53).

"Processing rates also advanced. The average charge for chilling, cutting, wrapping, and freezing increased from $1.65 per 100 lbs. to $2.01.

"In plants where the processing charges included grinding, rates averaged $2.37 per 100 lbs. in 1946, compared with $1.87 in 1943. Curing rates increased from $3.15 per 100 lbs. to $3.41. Smoking rates averaged $2.07 per 100 lbs. compared with $1.68 in 1943, and ranged from $1.00 in Maryland to $5.00 in New Jersey.

"Lard rendering cost, on the average, $2.90 per 100 lbs., compared with $2.40 in 1943; and ranged by areas from $2.79 to $4.32.

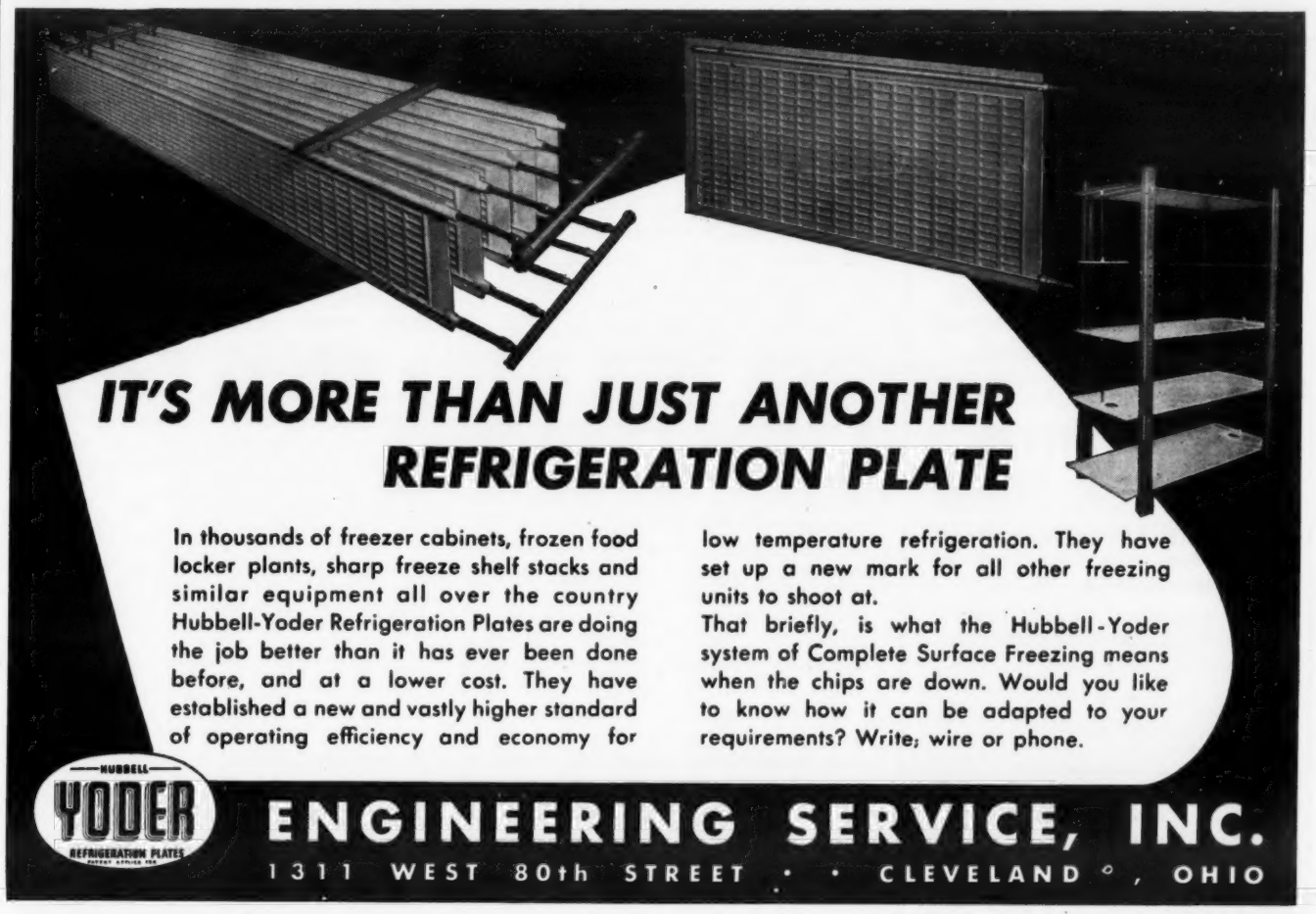
"Charges for killing and processing poultry varied widely, and averaged

(Continued on next page)

Table III

Percentage of Plants with Specified Locker Capacity

Population of Town	0-199 Lockers	200-399 Lockers	400-599 Lockers	600-799 Lockers	800-999 Lockers	1,000 Lockers and Over	All Plants
0- 499	49	31	13	6	5	4	23
500- 999	19	24	13	7	3	2	16
1,000- 1,999	12	22	24	14	11	3	17
2,000- 4,999	11	13	25	28	25	14	18
5,000- 9,999	4	5	11	21	14	20	10
10,000-24,999	2	3	10	15	21	24	9
25,000 and over	3	2	4	9	21	33	7


IT'S MORE THAN JUST ANOTHER
REFRIGERATION PLATE
In thousands of freezer cabinets, frozen food locker plants, sharp freeze shelf stacks and similar equipment all over the country Hubbell-Yoder Refrigeration Plates are doing the job better than it has ever been done before, and at a lower cost. They have established a new and vastly higher standard of operating efficiency and economy for low temperature refrigeration. They have set up a new mark for all other freezing units to shoot at.
That briefly, is what the Hubbell-Yoder system of Complete Surface Freezing means when the chips are down. Would you like to know how it can be adapted to your requirements? Write, wire or phone.
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REFRIGERATION PLATES
ENGINEERING SERVICE, INC.
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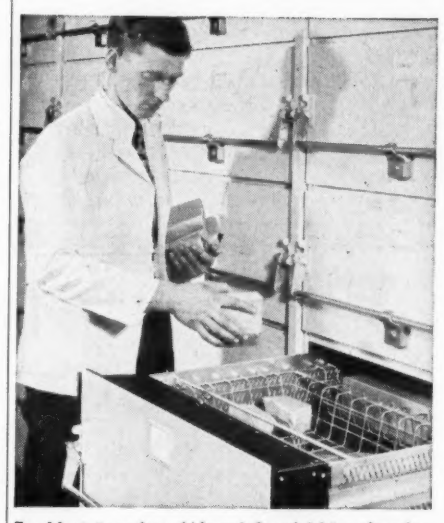
THE MASTER SERVICE MANUALS – – –

— — — and other books of the Refrigeration Library are depended upon as textbooks in trade schools from coast to coast.

BUSINESS NEWS PUBLISHING CO., DETROIT

HERE'S WHAT'S *NEW* AND *BETTER*

about Iceberg Refrigerated Lockers

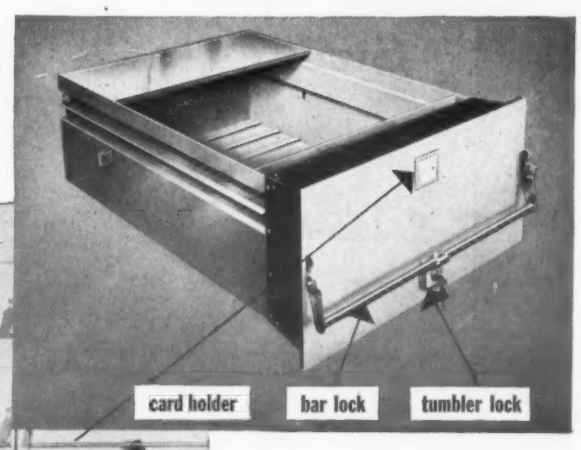


For blast-freezing. (Above) Special blast-freezing drawers available for sharp freezing. Blast-freezing drawers easily and quickly interchangeable with regular drawers in section next to refrigeration sections.

The frozen food locker with zero-cold *built* in and *kept* in . . . no cold room required . . . flexible capacity to fit changing needs.

They are the only completely factory engineered, fully insulated, self contained, sectional "Warm Room" frozen food lockers providing "custom tailored" installations to fit your needs. Easily installed, capacity increased or disassembled for relocation. All required, level floor, electric and water connections to install in less than 24 hours. Owners or customers serve themselves in normal room temperatures. Perfect for locker rental or bulk storage. Blast-freeze drawer section provides sharp freezing. For complete details use coupon below.

How it is used. (Right) Stored foods readily accessible at all times. Each drawer easily identified by name card. Drawers roll on top-suspended roller bearings. No sticking due to freezing. Drawers seal themselves from rest of unit while open. Automatic bar lock insures complete sealing when drawer is closed.



Unit illustrated (Left) is Iceberg Refrigerated Locker Model 660—60 drawers (drawers on both sides), each approximately 6 cu. ft. net storage capacity; 240 lbs. meat loading per drawer or its equivalent in other frozen foods. Models in Series 600 range in capacity from 10 to 80 drawers. Models in Series 300 (not shown here) with drawers on one side only, range in capacity from 5 to 40 drawers.

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REFRIGERATED LOCKERS
FROZEN FOOD STORAGE MADE EASY

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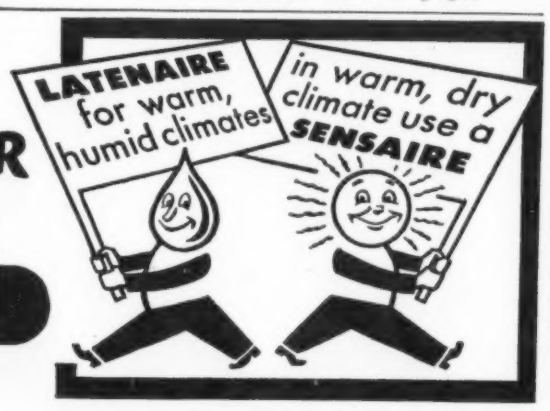

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Excellent opportunity for high caliber man with successful record and experience on light commercial and domestic equipment. Reply by mail only giving complete details as to age, education, experience and projects handled.
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Ice Cream Cabinets and Soda Fountains in large quantities direct from manufacturer for export.
Box No. 2368
Air Conditioning & Refrigeration News

FCA Survey--

(Concluded from preceding page)

18.5 cents each for fryers. Charges for processing turkeys averaged 46 cents a bird.

"For wrapping and freezing only, rates averaged 7.9 cents a bird and 2.2 cents per lb. (dressed weight) for fryers; and 22.3 cents a bird or 2.2 cents a lb. for turkeys.

"Processing and freezing fruits and vegetables averaged 2.76 cents per lb. Rates for such service in most areas were lower than the cost of providing it. Many plants might find it desirable to raise the rates for such service and then to expand the operations to round out their services and get full use of the plants.

"The present trend in the industry is toward a more complete line of processing services for the patrons. Many plants are now offering, in addition to meat chilling, cutting, wrapping, freezing, and storing, such other services as slaughtering, curing, smoking, lard rendering, fruit and vegetable processing and freezing, poultry dressing and freezing, sale of commercial frozen foods and locker supplies, bulb-zero storage and high temperature egg, fruit, and vegetable storage.

"A few plants are experimenting with the freezing of poultry, berries, fruits, and vegetables on a semi-commercial scale for sale through local outlets.

"In some areas groups of plants under one management are centralizing all slaughtering and processing services in one location in order to benefit from the greater efficiency resulting from more volume and the use of labor saving equipment.

"These centralized plants also to do considerable custom slaughtering and processing for non-locker patrons such as meat markets, restaurants, and hotels.

"Many frozen food locker plants are in an excellent position to become the central distributing point for home grown and commercial frozen foods in small towns. Such plant operators are now distributors of commercial frozen foods from whom the retail outlets in the town obtain their frozen food supply."

Checking into the locker operators' attitude toward home freezers, the surveyors found that "the increasing popularity of home frozen food units has aroused much speculation among locker plant operators as to their possible effect on demand for locker plant services.

"Opinion on the subject was divided. Most operators agreed that home units of one type or another would come into more or less general use.

"Agreement, however, stopped at that point. Some operators predicted that business in their plants would decline as home units increased in number. Other operators saw the home unit as a supplement to their business from which additional processing revenue could be obtained.

"Still others foresaw the use of locker plants decline as a facility for the storage of frozen foods and develop into a processing and freezing center serving home units.

"More recently the general consensus has been that even though there might be some decline in the use of lockers for storage purposes, the resulting loss of income would be more than offset by the increase in income from processing for the home units."

Eastern Locker Operators To Hold First Convention June 9-11 on Manhattan

NEW YORK CITY—Locker plant operators from 12 eastern states are scheduled to gather for their first regional convention June 9 to 11 in the Hotel New Yorker here.

Prepared for them is a program which includes a meat cutting competition, panel discussions, addresses on different aspects of the locker industry by officials of various frozen food associations and other authorities in the field, more than 50 exhibits by manufacturers and suppliers, a display of a model locker plant, and moving pictures on industry subjects.

Also planned are a floor show and dancing to the music of Charlie Peterson and his Hotel New Yorker ice show band.

Keith J. Bauder, director in charge of public relations for the National Frozen Food Locker Association, is convention chairman.

According to the tentative program outlined by Mr. Bauder, the meat cutting competition will pit representatives of the various states against each other for possession of a loving cup and six other prizes on Monday and Tuesday, June 9 and 10.

The contest will be judged by meat experts who will rate the contestants according to speed, neatness, and cutting ability.

Following each contest session, meat wrapping demonstrations will be conducted by experts who will utilize different types of packaging materials.

A meat cutting demonstration by an acknowledged expert, Wilbert Witte of Biro Saw Co., is scheduled for Tuesday afternoon.

On Wednesday, a complete poultry eviscerating line will be operated to demonstrate the killing, mechanical plucking, and packaging of poultry.

Two breakfast panel discussions, one on quantity buying of meats and the other on procurement of frozen foods, are scheduled for Tuesday and Wednesday mornings. Other discussion sessions will cover meat curing, what the customer would like the locker operator to do, and incidental locker plant problems.

Clarence Birdseye, frozen foods pioneer, and Dr. Carl Butler, director of research at GLF, will address the grand banquet Tuesday evening, according to Mr. Bauder. Mr. Birdseye's subject has not yet been announced. Dr. Butler will speak on the subject of "Frozen Assets vs. Food Surpluses."

Representatives of frozen foods associations designated to address the convention include E. G. Spencer, president of the National Frozen Food Locker Association; Al Guggedahl, secretary of the same group; C. Courtney Seabrook, president of the National Association of Frozen Food Packers; and Ray Farquhar, executive secretary of the Frozen Food Locker Institute.

Other scheduled speakers include W. Paul Jones, vice president of Philco Corp., who will talk on "The Home Freezer and the Locker Plant"; C. E. Dillon of Koch Butcher Supply Co., "Slaughtering—A Locker Plant Service"; L. B. Darrah of Cornell university, "Costs and Efficiency in Locker Plant Operation"; and E. W. Williams, editor and publisher of Quick Frozen Foods, "The Future of the Locker Plant."

During the convention, 20 films on the locker industry will be available upon request for showing to delegates. Also, a complete model locker plant, a project of the Frozen Food Locker Institute, will be on display.

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FREE!
to Locker and Home Freezer Owners
COMBINATION
Salt and Pepper Shaker
With Each Purchase
BEEF Choice or Grade A, Whole or Half Guarantee Yourself the Best
PORK Grain Fed, Whole or Half
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TRY SMOKED TURKEY
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CUT, WRAP and QUICK FREEZE
JOE'S MEAT PROCESSING
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More active promotion of their processing services by local locker and quick freezing plant operators is evidenced in this advertisement which appeared recently in the Bakersfield Californian.

1948 PAK-A-WAY
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HOME AND FARM FREEZERS

6-12-18 Cubic Foot Sizes

★ 18 YEARS EXPERIENCE in the manufacture of low temperature cabinets.
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Refrigeration Problems

And Their Solution

By P. B. Reed

For Service and Installation Engineers

Manager, Refrigeration and Air Conditioning Division, Perfex Corp.

The Refrigerated Railway Car

The process of producing refrigeration by a machine right at the place where refrigeration is used, instead of making ice at some remote point either mechanically or by nature, and then using the ice to produce refrigeration, is what we usually mean by the term "mechanical refrigeration" or "electric refrigeration."

By-passing such secondary refrigerants as ice or brine and applying refrigeration directly to the foods or other perishables to be refrigerated, has eliminated or reduced many losses and has resulted in greater convenience. This has been largely responsible for the phenomenal growth of electric or mechanical refrigeration and its invasion into almost every field in which refrigeration is used.

A NEW REFRIGERATION FRONTIER

But there is one field of use for refrigeration that is virtually untouched by mechanical refrigeration; where ice reigns supreme without competition worthy of mention. That field is the railway refrigerator car.

And it is a tremendous field, too. Each month something like 125,000 railway refrigerator cars are loaded and refrigerated by the use of ice. The railway refrigerator car is the ice industry's best customer for it used about 11 million tons of ice last year, which is *20% of the entire output of ice in the United States.*

Of the 125,000 cars loaded per month, probably not over a dozen—perhaps only a half-dozen—were mechanically refrigerated and they were experimental cars on test.

To completely mechanize all of the refrigerator cars in existence today would require about 150,000 refrigerating systems! And they would not be ¼-hp. units either. They would be 3 to 5 ton units. Truly, this would be a lush market for the builders of refrigerating equipment to invade!

DIFFICULTIES MORE ECONOMIC THAN MECHANICAL

And why is this? Is there something peculiar to railway refrigeration that closes the door to mechanical refrigeration? Is this one field in mechanical refrigeration cannot enter? Can't a mechanical system be made to work successfully on a refrigerator car?

The difficulties are less of a technical or mechanical nature than they are a matter of economics and organization. It is true that there are no mechanical systems that have been used in sufficient numbers to be certain that they would be mechanically satisfactory, but they could and would be quickly developed and perfected if the economic and organization objections were overcome.

An examination of what these economic and organization factors are, how they affect the selection of design and what the trend seems to be, is the purpose of this article.

Perhaps the most difficult stumbling block in the path of mechanization is the insistence by the railroads, that the refrigerator car be an all-purpose car. That is, that it can be quickly and easily converted from use as a refrigerator car to use as an ordinary freight car.

UNBALANCED LOADING

Those areas in the United States that send away products that must be refrigerated are not necessarily areas that need to have an equal tonnage of products brought in that need to be refrigerated. Or conversely, an area, such as New York City, may require a very great deal of refrigerated foods brought in by rail but may ship out only a small part of that tonnage of refrigerated products.

The west coast ships roughly twice as much refrigerated foods eastward (fruits, vegetables, etc.) as it requires from the east (meat, dairy products, etc.).

Thus for every two refrigerated cars moving eastward, one would come back refrigerated and one not refrigerated. If that unrefrigerated car going westward cannot be used as an ordinary freight car for furniture, automobiles, grain, steel, etc., then it must go westward empty; and empty cars cost almost as much money to haul as do filled ones.

Even if the refrigerator car is fully interchangeable as an ordinary freight car, it still is not in use all the time. On the average, the refrigerator car is empty about one-third of the time; is refrigerated about one-third of the time, and is loaded unrefrigerated about one-third of the time.

Even with the heavy volume of freight being carried by the railroads today, they are having heavy going in trying to show a small profit. Many are bankrupt and operating under receivership. So they must avoid any investment, such as in mechanical refrigeration equipment, that might not pay its way and that might be an unused and therefore a non-producing investment for a large part of the time.

Then too, even when under refrigeration there is a difference in the requirements of the products carried. The temperatures to be maintained and the amount of refrigeration necessary, vary. One loading may be of lettuce that needs high humidity and a comparatively high temperature, and the next loading may be of frozen packaged fruit that should be kept at 0° F. or below.

SERVICE AND MAINTENANCE

One very important factor is the matter of maintenance and service. The railroads have gained experience and have formed a skeleton service organization in connection with the air conditioning of passenger and Pullman cars, but the adoption of mechanical refrigeration to their refrigerator cars would require a drastic expansion in their maintenance, service, and shop repair facilities. Stocks of parts would have to be multiplied and strategically located and a stepping-up of the tempo of service would be necessary.

If the air conditioning system of a passenger car fails, the passengers can survive by opening the windows or they can be transferred to another car. If the refrigerating system on a refrigerator car loaded with packaged frozen strawberries fails at a remote place, something has to be done and at once or the railroad pays a claim for several thousand dollars loss.

ICING STATIONS

In addition, there are hundreds of icing stations around over the country, set up to ice refrigerator cars loaded with perishables nearby, or that are in transit. These icing stations are ordinarily not a part of the railway system, but are closely connected to the railroads. Some, in fact, are owned or operated as a private venture by railroad officials. The widespread use of mechanical refrigeration on railway refrigerator cars would reduce or eliminate the need for some of these stations.

In another article we will examine some of the mechanical aspects of the situation, some of the physical requirements, what types appear suitable, and what the trends seem to indicate.

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Recessed base—High bake finish—Sizes 4-6-8 ft.

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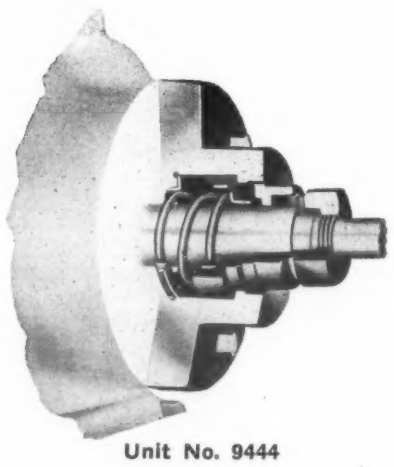

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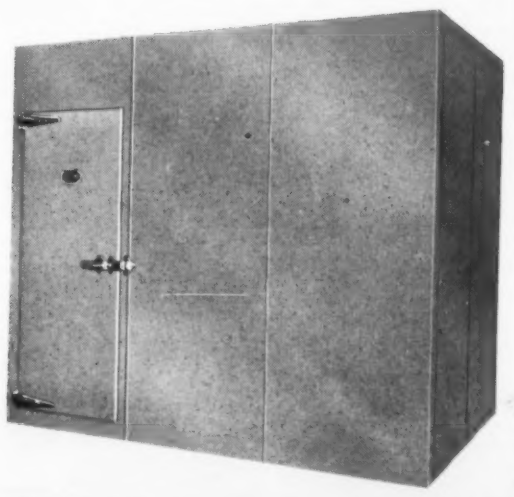

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New Preparation Readies Metals for Refurbishing

AMBLER, Pa.—Deoxidine, a phosphoric acid metal cleaner designed to prepare steel, aluminum, brass, copper, and other metals for painting, is now being manufactured by the American Chemical Paint Co. here.

The cleaner is said to remove oil and light scale, eradicate rust, neutralize rust producers, and create an etched, inert surface to hold the paint. For different metal cleaning jobs, Deoxidine is made in various grades so that it may be applied by brush, by spray, or by immersion, the company asserted.

It warned that Deoxidine cannot be used with zinc, cadmium, or magnesium.

Steps In Reconditioning Hermetic Units Outlined by California Rebuilding Firm

Editor's Note: This is the second and concluding instalment of a two-part article about the special processes and fixtures developed by the Willis Refrigerator Co. of Long Beach, Calif., through nearly 10 years of experience in reconditioning hermetically sealed refrigerating units. This part takes up the reworking of motors, dehydrating procedure, and testing and checking of the reconditioned unit.

In reworking motors, all rotors except cast ones are first placed over a gas flame to melt the solder, and the solder is blown off with compressed air, after which the rotors are silver soldered at both ends.

In rewinding the stator, Mr. Willis uses single cotton enamel wire, and insulates the stator with sheets of glass fiber insulation. Then the stators are dried. In the drying of G-E stators and compressor parts, as well as most other parts Mr. Willis does not use an oven.

"With an oven we can never tell when the parts are dry, and we can never be sure that the parts are absolutely dry when we take them out of the oven. So we have developed our own drying method, which is surprisingly simple."

It consists of a small tank of compressor oil sitting over a burner on an old gas stove. That's all!

The tank is of approximately 3-gal. capacity and is open at the top. There's a thermometer hanging on the wall to test for temperature, because the oil should be held at 260° F. But, says Mr. Willis, the oil tank is usually kept going all the time so the thermometer is seldom used.

To dry a stator, valve plate, or compressor, it is simply suspended in the boiling oil. As long as bubbles come up in the oil, there is moisture in the part. When the bubles stop, the part is completely dehydrated. It takes about 15 minutes altogether to dry a stator this way, according to Mr. Willis.

"Another advantage of this method," he points out, "is that there is no oxidizing effect on the metal which you can get with an oven type dehydrator. And oxidization is what spoils everything."

This dehydrating method is not confined to parts small enough to fit in the tank, he adds. Big coils can be dehydrated, too. A small circulating pump is used to pump the hot oil from the container on the stove through the coil, the oil discharging back into the container. The hot oil is circulated until no bubbles appear in the discharge, and, says Mr. Willis, this doesn't take very long. Then the oil is flushed out of the coil with methyl chloride.

Returning to his account of how G-E hermetics are repaired, Mr. Willis says that after the parts have been completely repaired, the check valve reseated, and everything dehydrated, the compressor body is reassembled.

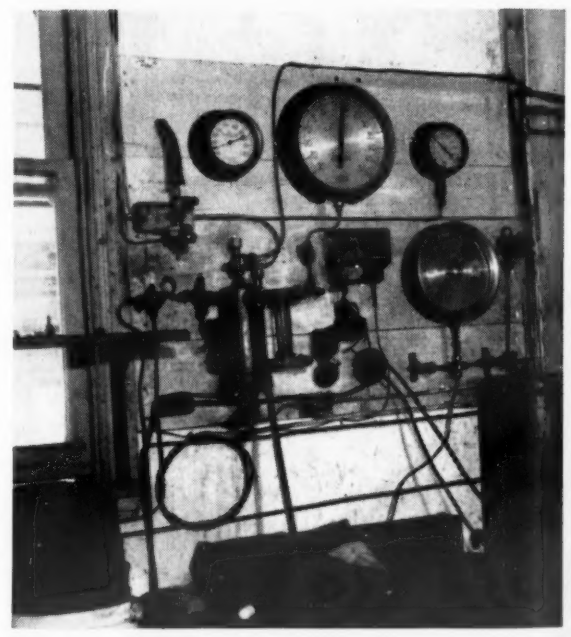
(Mr. Willis has developed his own method of reseating these check valves, and he is not in a position to disclose details of this operation.)

Motor leads should then be silver soldered to the terminals.

The compressor is then tested to

(Concluded on next page)

Charging Fixture Has Some Unusual Features



Heat supplied by tap water is employed in this charging setup in the Willis shop. The charging setup is designed to permit rapid charging of accurately measured amounts of refrigerant.

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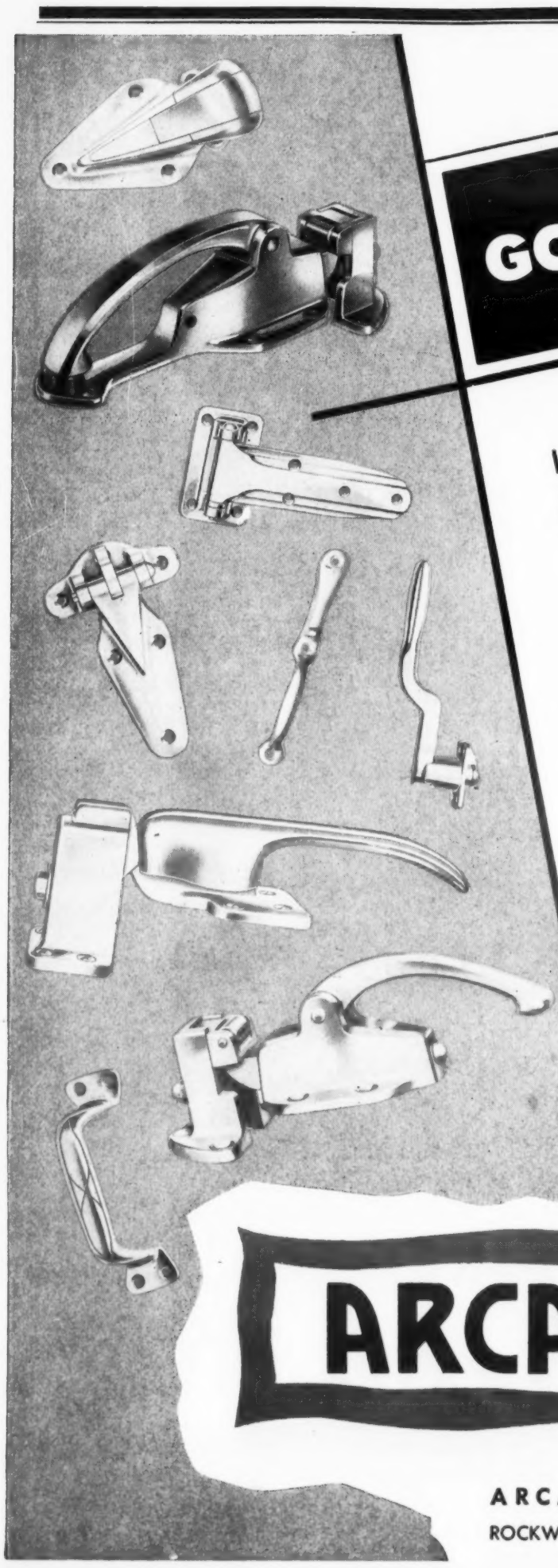
PROVES that RANCO specific designing for specific requirements is RIGHT for the job

"Tested-by-Use" performance of more than 12 million Ranco Controls is ample proof that no *single control* can adequately meet all the requirements of the refrigeration and air conditioning industries. Ranco's experience proves that only through controls designed for specific types of jobs can the highest efficiency and accuracy and longest life be obtained. That is why Ranco supplies exact or general type replacement controls for every kind of cooling or freezing unit. Because Ranco Controls are always right for the job they give better all-around performance and function for more years.

Ranco Control O-1408. For ice cream freezers, frozen food lockers and refrigeration units where temperatures as low as -40° must be maintained.

See your wholesale supplier—he knows the exact Ranco Control for installation on any job—and he has it in stock.

Ranco Inc. COLUMBUS 1, OHIO



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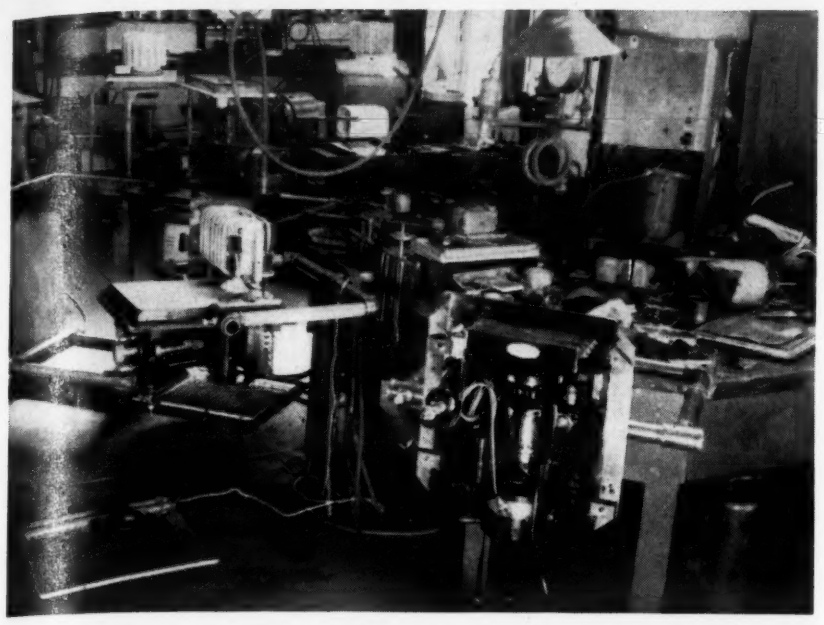
Special Work Benches for Various Methods



In the center of the Willis Refrigerator Co. shop is this special bench fitted to facilitate servicing of Coldspot hermetic units.

Dehydrating, Testing, Charging Methods For Hermetic Units as Used by Willis Co.

(Concluded from preceding page)

see if the machine will pump and if the oil pump performs satisfactorily.

"This test is not made under pressure," he states. "If it's a good pump it will pump a perfect vacuum whether it's under pressure or not, so we don't need a complicated pressure test."

If the compressor passes the pumping test, it is then put back into the dome. Bolted shells are merely bolted together. For welded shells Mr. Willis recommends the use of bronze torch welding.

BRONZE TORCH WELDING

"Bronze torch welding makes a weld as strong as an electric weld, and it is much easier to handle. It is difficult for the average welder to make an electric weld which won't leak, but the bronze flows so easily there is no danger of a leaky weld."

Next operation is to recharge the unit. For this operation Mr. Willis has devised a charging tank with a sight glass to measure the amount of refrigerant that goes into the unit. Inside the charging tank is a water coil through which tap water is circulated.

An approximate amount of liquid refrigerant is allowed to enter the charging tank. Heat of the water causes the refrigerant to evaporate quickly and flow into the unit through the charging line which was previously fitted to the evaporator. Units are charged until they frost back.

The whole operation is very quick and accurate, Mr. Willis contends.

RECORDING TESTS

Following running tests with recording clocks to check performance of the unit, it is given a new paint job. White enamel is sprayed on the dome, and a synthetic chrome finish goes on the evaporator.

The unit is now complete, and carries a one-year guarantee.

As stated previously, Mr. Willis' operations are not confined to servicing G-E hermetics. All makes are handled, and special tools and fixtures have been devised to facilitate operations on these, too. There is, for example, a special machine designed by Mr. Willis for internal grinding of Coldspot compressors.

"A shop has to have the equipment to do the job," he says, and if it's not available on the market, or is too expensive, Mr. Willis makes his own.

There are two other "angles" on the Willis firm. To take advantage of the California climate there are folding doors all across the front of the building. Most of the year these are kept open. It comes close to being an open-air shop.

The other angle will interest the Humane Society. Mr. Willis' prize toy fox terrior lives in the shop. There's a flap in the rear door for the dog to use when the front folding doors are closed.

Detroit Names Murphree To 5-Man Refrigeration Board of Examiners

DETROIT—Appointment of George C. Murphree of Refrigeration Maintenance Corp. to the Detroit refrigeration board of examiners was announced recently by Mayor Edward J. Jeffries, Jr.

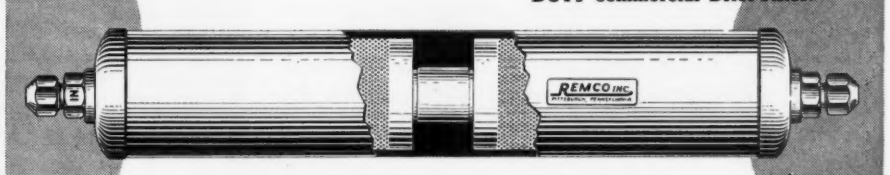
Mr. Murphree, who was nominated for the position by the Refrigeration Contractors Association of Detroit, joined William F. Mercier of Mercier & Spalding, Inc., already a member of the board, as representatives of local refrigeration contractors.

The five-man board, created under the city's refrigeration code, examines and approves candidates for refrigeration contractor's licenses, and, for due cause, recommends the suspension of such licenses.

Two other members of the board represent the municipal department of buildings and safety engineering and one represents the users of refrigeration equipment.

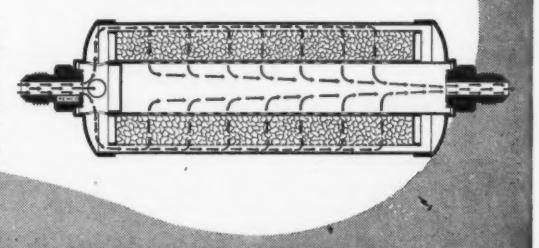
REMCO HEAVY-DUTY "CROSS-FLO" DRIER-FILTERS AND FILTERS

SINGLE CARTRIDGE TYPE — 18 cu. in. silica gel; 34 sq. in. course-filter surface; 14 sq. in. fine-filter surface — 4½ sq. in. effective flow area—sizes ¼", ⅜" and ½" SAE flare. (Also with wool filter element instead of drying agent). Rugged and attractively finished. A truly HEAVY-DUTY commercial Drier-Filter.



TANDEM CARTRIDGE TYPE has double silica gel, filter capacity and flow area for larger, dirtier, wetter jobs. Sizes ⅜", ½", ⅝" and ¾" SAE flare. Supplied with 2 drier-filter cartridges, 2 filter cartridges or combination of 1 drier-filter and 1 filter cartridge. Handles big jobs with capacity to spare.

UNIQUE "CROSS-FLO" DESIGN eliminates roiling, dusting and packing of drying agent, which eliminates pressure drop, clogging, poor refrigerant control performance and expensive call backs—permits installation in liquid line, suction line or between refrigerant control and evaporator.



No. 3

ASK YOUR WHOLESALER . . . OR WRITE

REMCO, INC. 49th Street & A.V.R.R. Pittsburgh 1, Pa.

WATCH FOR THIS DISPLAY!

You will find this attractive display of THAWZONE and TRACE, illustrated here, on the counters of leading refrigeration equipment wholesalers throughout the country. Let it remind you that:

(1) THAWZONE, the moving dehydrant, circulates and searches out moisture, destroying it chemically. For new and reconditioned units, as well as old.

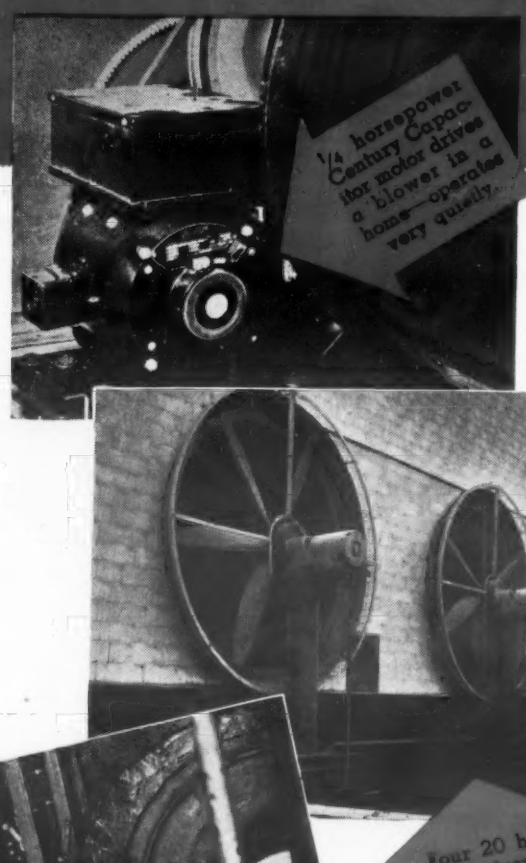
(2) TRACE is a highly effective refrigerant leak detector. Its stable red color reveals leaks instantly in old or new systems.

These two products are partners in purpose . . . to keep refrigeration systems at the height of efficiency.

HIGHSIDE CHEMICALS COMPANY

195 VERONA AVE., NEWARK 4, N. J.

FOR EVERY BLOWER APPLICATION THERE'S A CENTURY MOTOR THAT WILL OPERATE SMOOTHLY · QUIETLY · DEPENDABLY

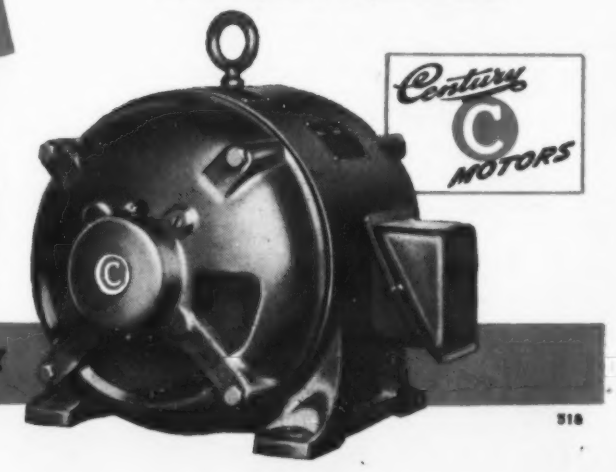

¼ horsepower Century Capacitor motor drives a blower in a home—operates very quietly.
Four 20 h.p. Century Splashproof motors operate cooling tower fans—protected against all weather conditions.
5 horsepower Century Splashproof motor operates a blower in a large hotel—provides variable speeds to meet changing requirements of air conditioning

Century motors' quiet starting and operating and their unusual freedom from electrical and mechanical vibration contribute to comfortable air circulating in the home, commercial buildings or industrial plants.

There's a type of Century motor protection to meet the requirements of any kind of atmospheric condition — whether clean or dirty, hot or cold, whether indoors or outdoors.

Century builds a complete line of electric motors and generators, fractional and integral horsepower, in the popular sizes to meet the requirements of industrial production, processing, commercial and home needs.

Specify Century for all your electric power requirements.



CENTURY ELECTRIC COMPANY

1806 Pine Street, St. Louis 3, Missouri

Offices and Stock Points in Principal Cities

518

NO! DICELER

DOES NOT SELL MOTORS!

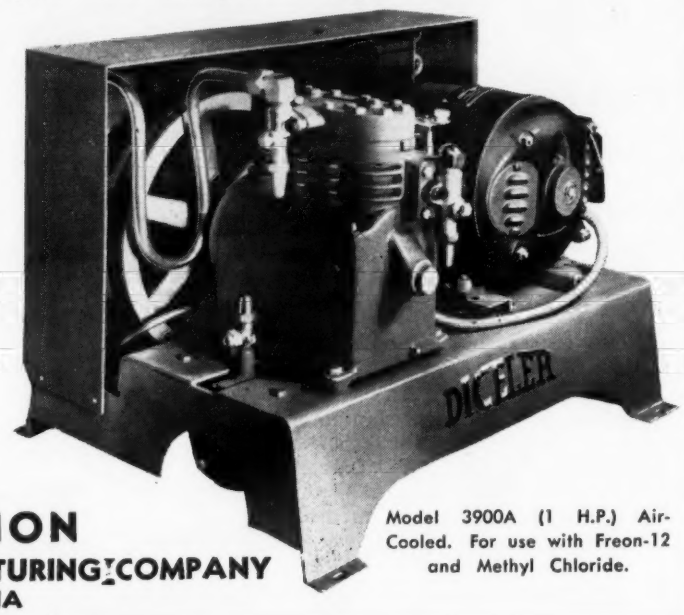
That is why DICELER units are classified by B.T.U. Productive Capacity rather than by deceptive motor horsepower ratings.

In choosing a unit, select one best suited for your particular requirements.

Compare DICELER productivity with other models of higher horsepower ratings, and you will see why substantial savings and performance of guaranteed dependability can be effected with our units.

⅓—½—¾ AND 1 H.P.
MODELS NOW IN PRODUCTION

Write for illustrated descriptive folder



Model 3900A (1 H.P.) Air-Cooled. For use with Freon-12 and Methyl Chloride.

DICELER DIVISION
GENERAL MACHINE AND MANUFACTURING COMPANY
BERWICK, PENNSYLVANIA

THE MASTER SERVICE MANUALS - - -

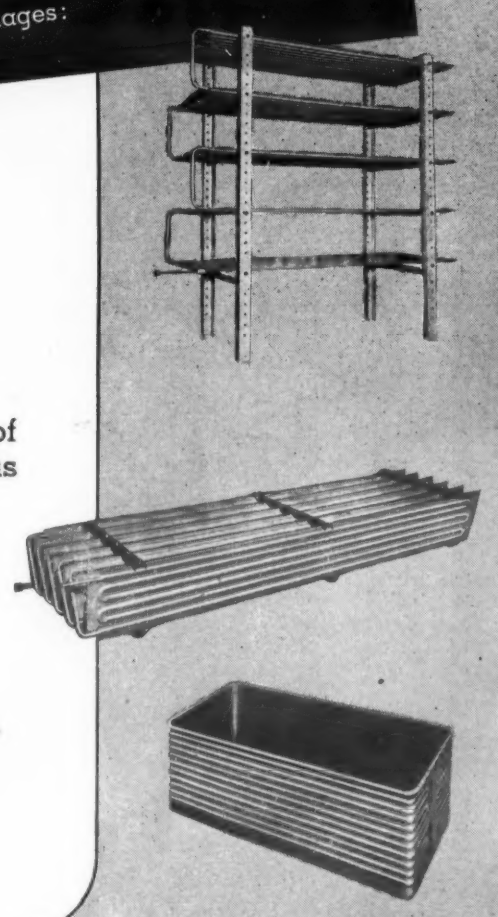
— — — and other books of the Refrigeration Library are depended upon as textbooks in trade schools from coast to coast.

BUSINESS NEWS PUBLISHING CO., DETROIT

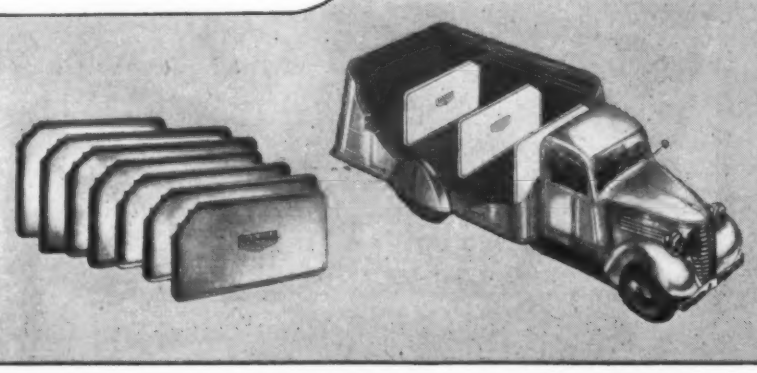
KOLD-HOLD
EVAPORATOR PLATES
For ALL Lowside Applications

The New Kold-Hold "Quick-Action" Serpentine Plates offer outstanding economies and efficiency. Specifically, these plates either used separately, in banks, in plate stands, or as complete cabinet liners, assure you the following advantages:

1 Easy installation.
2 Maximum prime surface.
3 Highest rate of plate heat acceptance.
4 No possibility of short circuiting the flow of refrigerant which flows in one continuous pass from inlet to outlet.
5 Oil logging positively prevented.
6 Minimum pressure drop.
7 Tested to 300 lbs. per square inch pressure.
8 Has an appreciably higher "K" factor.
9 Thoroughly cleaned and dehydrated.



For transportation of perishables, Kold-Hold Truck Plates prevent loss from spoilage, preserve truck bodies and eliminate unnecessary time losses from loading and unloading.



KOLD-HOLD
(Write For Complete Catalog!)
KOLD-HOLD MANUFACTURING COMPANY *500 E. HAZEL STREET, LANSING 4, MICHIGAN*

Servicing Truck Refrigeration Units

Editor's Note: Adjustment of thermostatic expansion valves used in conjunction with a hold-over plate system in a truck is discussed in this instalment of the series outlining design, installation, and service on truck refrigeration systems employing eutectic or hold-over plates. This section of the series was prepared with the cooperation of Kold-Hold Mfg. Co.

Instalment No. 36

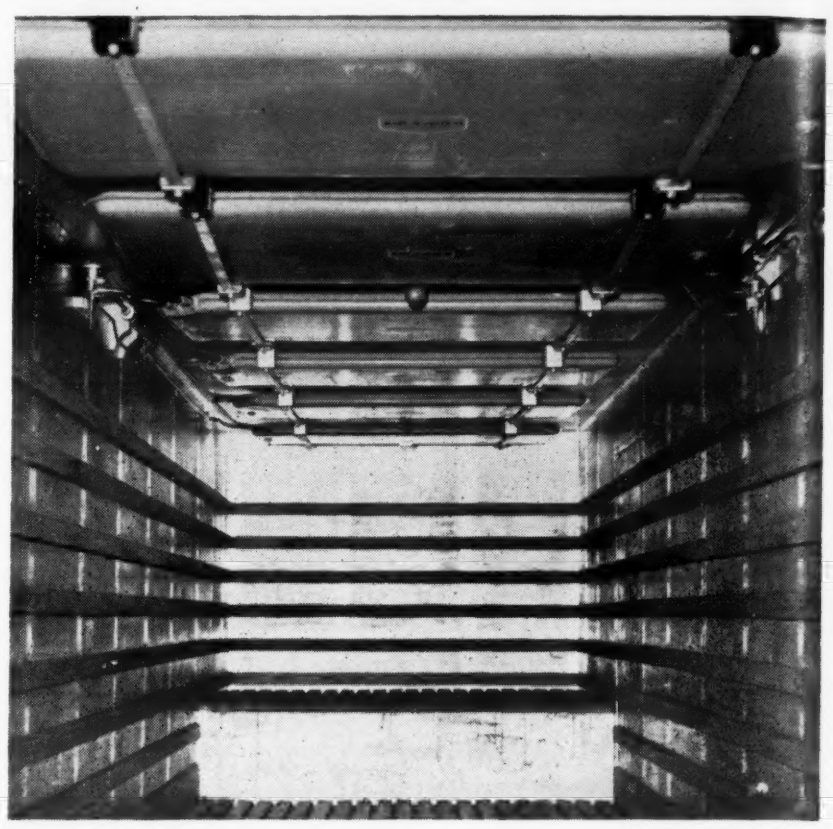


Fig. 15—In a big truck installation, more than one expansion valve is often required, as shown in this photo. The valves may be seen at either side near the top.

* * *

Low Pressure Control

The low-pressure control supplied with the condensing unit is connected to the crankcase of the compressor and may be adjusted to either cut the main motor circuit or actuate the relay, stopping the motor at a predetermined back-pressure. The pressure control also has a range of adjustment so as to make contact either directly or through a relay for starting the motor at a predetermined higher back pressure.

The setting of the cut-out point will vary somewhat with each individual system, but it should be approximately that shown in Table 3. The range between cut-in and cut-out points should be sufficiently wide to prevent short-cycling of the condensing unit, but this range should not be so wide as to keep the circuit open after the truck plates have been frozen.

Condensing units should never be operated without first adjusting the high pressure cut-out to the proper setting. Controls should never be blocked out unless the unit is being tested with gauges on the machine. Even under these circumstances someone should be in attendance at all times to watch the gauges.

When and How to Adjust Expansion Valves

Thermostatic expansion valves should never be adjusted while the system is warm. Once the system is in settled operation, the refrigerant will return through the suction line past the control bulb of the valve properly so that no adjustment will likely be necessary.

After the refrigerant temperatures are below 32° F., a properly operating expansion valve will maintain the active frostline at or near the bulb position. If there is sufficient refrigerant in the system, the frost line will "migrate" forward and backward along the suction line, possibly as much as 2 ft., at intervals of about 5 minutes.

Superheat of these expansion valves is factory-set at between 8° and 15°. Thus, the valves will open when the temperature of the suction line at the bulb becomes 8° to 15° higher than the temperature of the refrigerant at the pressure under which the system is operating.

If the factory setting of the expansion valve has been changed, it may be necessary to readjust this setting to obtain full, but not excessive, flow of refrigerant. The adjusting screw of most expansion valves is reached by removing the bonnet at the bottom of the valve. Normal extension of the stem through the packing nut will be from 9/16 to 11/16 in.

Flow of refrigerant is reduced by screwing in this valve stem. Turning the stem counter-clockwise will increase the refrigerant flow.

Do not readjust the valve sooner than 30 minutes after the original adjustment was changed, because it requires some time for the system and valve to resume normal operation.

Proper refrigerant flow is indicated by the migration of the frost line. The valve can be adjusted to produce this condition when the truck plates are completely or partially frozen. The back pressure gauge will fluctuate slightly while the machine is operating, indicating the rate of the valve cycles.

Normal operation produces a reasonably rapid rise in pressure of 1 lb. to 2 lbs. when a valve opens fully. When the valve throttles there is a rather slow drop in pressure of more than 1 lb. to 2 lbs. These cycles occur approximately 3 to 10 minutes apart.

NEW NO. 47 CATALOG
NOW OFF THE PRESS
WRITE FOR COPY ON YOUR LETTERHEAD TODAY
REFRIGERATION AIR CONDITIONING HEATING
PARTS AND SUPPLIES
THE SUPPLY HOUSE THAT SERVICE BUILT
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2511 LAKE STREET, MELROSE PARK, ILL.

Steel 'Gray Market'--

(Concluded from Page 1, Column 2)

Mr. Kutz had been summoned by the subcommittee as the result of earlier testimony by an official of Standard-Dickerson Corp. This official declared he paid Mr. Kutz's firm $240 a ton for 50 tons of sheet steel when the mill price was $50 to $60.

Mr. Kutz explained to the subcommittee that his company, organized less than a year ago, is not a manufacturer. When he couldn't get steel from the mills, he said, he began buying and selling oil burners, valves, and pipe fittings.

The steel sold to Stangard-Dickerson, he related, was part of 250 tons purchased from David L. Wilkoff Co. of Pittsburgh for resale to Sunroc Refrigeration Co. He said the steel was obtained through a Mr. Barnett, of St. Louis, who was unable to finance the deal alone.

Sunroc, Mr. Kutz went on, refused to accept the steel—for which he had paid Mr. Wilkoff from $165 to $205 a ton—because it did not meet specifications. Therefore it was necessary to dispose of it in small lots, he said.

According to the witness, the steel originated at Inland Steel Co., Indiana Harbor, Mich. There, he claimed, it had been rerolled from ingots sent by Mr. Wilkoff.

There was very little money left, Mr. Kutz told the subcommittee, after he paid freight charges and traveling expenses, and split his profit "50-50" with Mr. Barnett. He said his profit on the sale to Stangard-Dickerson was $944.39, but it was cut to $472.19 by commissions of a like sum to other middlemen.

Inability to secure enough other materials to manufacture prefabricated houses was the reason offered by another seller—Krieger Steel Sections, Inc., Long Island City, N. Y.—for disposing of about 2,000 tons of steel. M. W. Ziegler, president, said the firm paid an average of $80 to $85 a ton for the steel and sold it for from six to 10 cents a pound.

"Because of the difficulty, the company was pinched and was forced to dispose of certain quantities of steel to meet payroll and other pressing obligations," he declared.

"In the over-all picture, even though the company received more for the steel that was sold than was paid for it, there was a tremendous loss in the development of the housing project which the company has no prospect of ever recouping."

Later, the subcommittee listened to the strange details of an unsuccessful transaction involving 240,000 tons of steel, a $40,000,000 letter of credit, an alleged "bonus" of $18,000,000 to a middleman and executives of "five big steel companies," and even a threat from "apparent gangsters."

Part of this story was supplied by E. A. Kerschbaumer, Pittsburgh steel broker. Mr. Kerschbaumer told the subcommittee it all started when he met Herbert M. Karp, of New York City, while looking for steel for the Sno-King Corp., of which he is treasurer.

Mr. Kerschbaumer said Mr. Karp promised to arrange for him to buy 300,000 tons of steel. After numerous conferences joined by numerous others, the broker testified, Mr. Karp "confirmed" the deal with a letter bearing the name Firth-Sterling Steel Co., of Pittsburgh.

This letter was said to have contained the company's approval of a sale of 240,000 tons. The company regretted, Mr. Kerschbaumer asserted, that it could not deliver the full 300,000 tons.

However, Mr. Kerschbaumer continued, the company later refused to honor the order on the basis that it was not "legitimate," and none of the steel was ever delivered. The company subsequently disclaimed the letter and claimed it had not authorized the sale.

Before the deal fell through, the broker testified, he was approached by a James Boyle, who was accompanied by two men described as "apparent gangsters." Mr. Boyle was identified as an agent for the "United Nations Supply Co., Brooklyn."

According to Mr. Kerschbaumer, Mr. Boyle told him he "understood the steel was available and that he wanted his—'or else.'" Mr. Boyle was to have received 50,000 tons.

Tom J. Smith, president of the Pressed Metal Institute, was expected to tell the subcommittee soon that more than 1,000,000 tons of sheet and strip steel have been offered to members of the Institute alone. He made this charge last week at a meeting in Detroit of the Institute's Michigan District.

Mr. Smith said a membership survey resulted in tracing the "black" market to 14 separate sources. A manufacturer in Erie, Pa., he claimed, recently traced a load of sheet steel for which he paid $300 a ton to the steel mill which had beeh reducing his quota of steel each month.

The steel mill, which explained that it had been shipped to a Brooklyn warehouse, denied responsibility, Mr. Smith reported. But, he said, it immediately increased the manufacturer's allotment to his historical requirements with regularly discovered "surpluses" in its stock.

Thomas L. Baker, chairman of the Michigan District and vice president of the National Stamping Co., told of receiving a telegram from A. A. Kattus, of Cincinnati, offering him 400 tons of cold rolled sheets at $230 a ton.

'Birthday In the Sky' for Carrier Executive

On the return leg of an airplane trip from Newark, N. J. to Carrier Corp.'s Syracuse plant not long ago, J. A. Gazelle (left) was treated to a surprise birthday party. Holding the cake is William Hecht, Carrier distributor for northern New Jersey, who, accompanied by 20 of his dealers, spent the day visiting the Carrier factory in Syracuse.

Magazine Advertising Expenditures On Home Freezers During 1946

Ranking of Companies

Food Freezers

Deepfreeze Div. of Motor Products Corp.	$157,756
Tyler Fixture Corp.	22,925
Amana Society	12,150
Philco Corp.	6,930
Chapman Refrigerator Sales	6,390
Schelm Brothers, Inc.	3,250
Beall Pipe & Tank Corp.	2,760
Electric Companies of Pennsylvania	1,067

Where It Was Spent

Amana

Amana Society, Amana, Iowa

Fortune	$ 1,850
House & Garden	800
House Beautiful	500
Saturday Evening Post	6,375
Collier's	2,625
Total	**$ 12,150**

Beall

Beall Pipe & Tank Corp., Portland, Ore.

Sunset	$ 2,760
Total	**$ 2,760**

Chapman

Chapman Refrigerator Sales, Cowallis, Ore.

Sunset	$ 6,390
Total	**$ 6,390**

Deepfreeze

Deepfreeze Div. of Motor Products Corp., Chicago, Ill.

House Beautiful	$ 16,920
American Home	15,692
Better Homes & Gardens	21,910
McCall's	8,200
Life	57,674
Saturday Evening Post	33,120
Time	2,970
New Yorker	1,270
Total	**$157,756**

Harder Freez

Tyler Fixture Corp., Niles, Mich.

Better Homes & Gardens	$ 5,400
Field & Stream	1,278
Outdoor Life	1,046
Saturday Evening Post	6,826
Collier's	8,375
Total	**$ 22,925**

Philco

Philco Corp., Philadelphia, Pa.

Good Housekeeping	$ 6,930
Total	**$ 6,930**

Polar-Freez

Schelm Brothers, Inc., East Peoria, Ill.

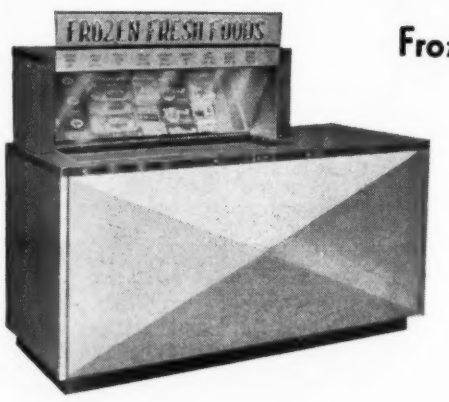
House Beautiful	$ 3,000
Business Week	250
Total	**$ 3,250**

Zero Freezers

Electric Companies of Pennsylvania, Harrisburg, Pa.

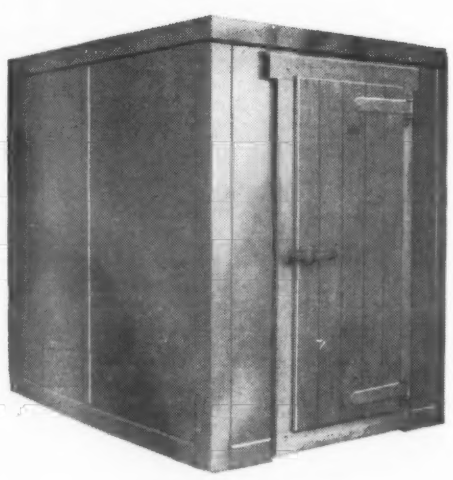
Grit	$ 1,067
Total	**$ 1,067**

ROGERS QUALITY LINE of Refrigeration



Frozen Foods Salesman

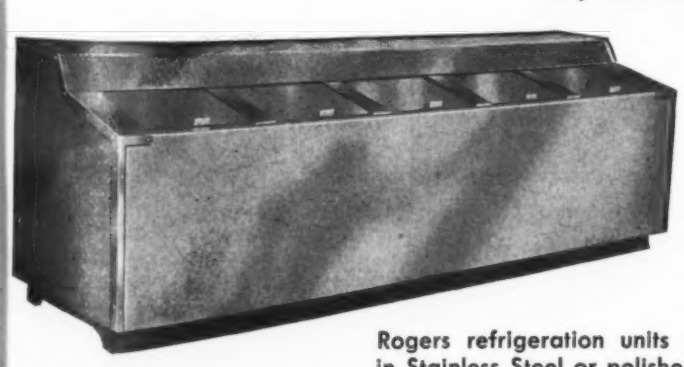
Shows them and sells them while maintaining proper temperature. Capacity 11.8 cu. ft. 5-in. Fiberglas insulation. Has heavy duty ¼ H.P. compressor. Main box is 6 ft. by 29½ in., 39 in. high.



Walk-in Cooler

All metal clad, inside and out (photo shows wooden door but new model has door of metal). Shiny and attractive in appearance and easy to keep that way. Built for permanence. Precision construction permits rapid and easy assembling. Two sizes: 6 by 8 feet and 6 by 6 feet, both 7½ high.

Dry Beverage Cooler



39 in. high, 30 in. wide, 6, 8, or 10 ft. long. Lids slide away or lift out. Removable dividers. 8-in. utility shelf.

Rogers refrigeration units are finished in Stainless Steel or polished Aluminum.

DEALERS WANTED

Write, wire or phone today for information on franchise.

Immediate Delivery!

W. ALLEN ROGERS Industries

BOX 272-AC DEMOPOLIS, ALA.

Truck Body Firm Tells Of Steel Market--

(Concluded from Page 1, Column 3)

son, we are again regretfully told that the amount of tonnage was sold to another Mr. So-and-So, possibly in a nearby town.

Contacting this last source, we find he has approximately 50% of the original purchase and obligingly offers it from $300 to $315 a ton.

"There are, of course, several types of metal other than body metal that can be used for this fabricating, which in turn carries quite a considerable write-up as of a year ago.

"It has come to the point in quoting whereby metals with known trade names, such as Plymetl, always carry a 15% higher quotation that stable materials which can be used at no greater cost than the push-around purchase that is required to fabricate bodies under this precarious condition."

It's different!

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REFRIGERATED DISPLAY WINDOW

Permits the display of open packages. The opened up package—frozen food as it will look when it reaches the home, stimulates buying, increases frozen food sales. Triple glass, brilliantly lighted display.

MAXIMUM STORAGE SPACE IN MINIMUM FLOOR AREA

Self contained refrigerating machine mounted beside display window. Heat rises away from refrigerated space. Condenser does not pick up floor dust. Low operating cost.

REFRIGERATED PLATE ABOVE THE STORAGE AREA

When lids are removed for rapid self service, display window refrigerated plate spreads a blanket of cold air over top of food avoiding rapid softening. Food can be piled closer to top providing more storage space. *Stainless steel or transparent sliding top.*

Write for full information and prices.
Immediate deliveries.

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CONDENSING UNITS AND PARTS
Jobber Inquiries Invited
A complete line backed by nearly a quarter century of user confidence. Write for prices.

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13 S. 5th St., Richmond, Ind.

PAR REFRIGERATION EQUIPMENT

Tops in
PERFORMANCE
ECONOMY and
EFFICIENCY
Lynch ... By Comparison — You'll Buy PAR
Manufacturing Corporation
General Offices, Toledo 1 • Factory, Defiance, Ohio, U.S.A.

FOR SALE
2—NEW 5 TON CHRYSLER AIRTEMP PACKAGE ROOM COOLERS
1—NEW 3 TON CHRYSLER AIRTEMP PACKAGE ROOM COOLER
1000—1/25 HP SHADED POLE, TOTALLY ENCLOSED, FAN COOLED ROUND BODIED MOTORS
BOX 2352, AIR CONDITIONING & REFRIGERATION NEWS

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DIVISION OF WEIL-McLAIN COMPANY
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Branch—809 West 74th St., Chicago, Ill.
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NIAGARA
"NO-FROST" METHOD WITH SPRAY COOLERS
... gives always full capacity because there is no interruption for defrosting at sub-zero temperatures; protects quality in foods.
NIAGARA BLOWER COMPANY
30 Years of Service in Air Engineering
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AND CAST
VALVES AND FITTINGS
for Refrigeration
NORTHERN INDIANA BRASS CO.
• ELKHART, INDIANA •

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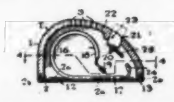
SUPERIOR VALVE & FITTINGS COMPANY
Pittsburgh 26, Pennsylvania
VALVES, FITTINGS & ACCESSORIES
For All
• Refrigeration
and
• Air Conditioning Systems

PATENTS

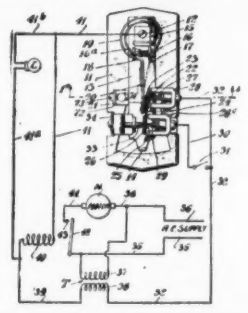
Week of March 25

2,417,860. THERMOSTATIC SWITCH. Edwin L. Cline, Pasadena, Calif., assignor to Clayton Mfg. Co., Alhambra, Calif. Application May 20, 1942, Serial No. 443,834. 18 Claims. (Cl. 200—140.)



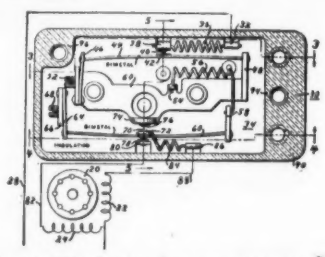
1. A thermostat device comprising: a body; a permanent magnet secured to said body and including portions arranged to magnetically retain said body upon a ferrous object; and thermally-responsive means carried by said body, including a surface lying in substantially the same plane as said portions of said permanent magnet, whereby said thermally responsive means is actuated in accordance with the thermal changes in said ferrous object.

2,417,911. SWITCH FOR AIR-CONDITIONING APPARATUS. John T. Carlson, Dayton, Ohio, assignor to The Master Electric Co., a corporation of Ohio. Application Dec. 29, 1938, Serial No. 248,171. 40 Claims. (Cl. 200—138.)



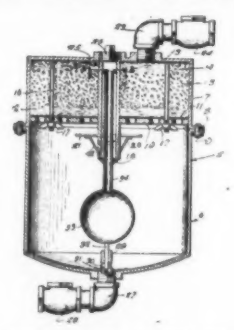
3. In a thermostat, a thermo responsive device, an arm actuated thereby, a member carrying two contacts swingably attached to said arm and stationary contact points adjacent said contacts, the member being so connected to said arm that when one of said contacts engages its contact point and the arm is given a further movement the other contact engages its contact point, at least one of said contact pairs being provided with co-acting magnetic means to produce snap action make and break of contacts.

2,417,912. SPLIT-PHASE MOTOR THERMAL STARTING SWITCH. Harry P. Clark, Oakwood, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application Aug. 31, 1944, Serial No. 552,166. 13 Claims. (Cl. 172—279.)



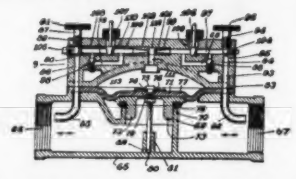
1. A control device for an electric motor having main and phase windings, comprising a thermally responsive element having a portion movable in a first direction upon heating and a second direction upon cooling, said elements being provided with a snap action throughout a certain range of its movement, means for heating said element by current flowing through said motor to cause said element to move in said first direction through said snap action range and beyond, means responsive to said movement for changing the energization of said phase winding and reducing the heating of said element but maintaining sufficient heating at a second rate of said element during the energization of the motor to cause it to move in said first direction beyond said snap action range, means responsive to a predetermined movement of said element in said first direction beyond said snap action range for further reducing the heating of said element to such an extent that the remainder is insufficient to prevent the element from cooling and moving in the second direction, and means responsive to the movement of said element in said second direction for restoring the heating of said element at said second rate, said further reduced heating rate being sufficient to prevent rapid movement in the second direction so that the restoration of the heating at the second rate will reverse the movement of the element before it passes through the snap acting range.

2,417,976. FLOAT VALVE FOR AIR FILTERS. Godfrey Franklin, Vallejo, Calif. Application July 29, 1944, Serial No. 547,156. 1 Claim. (Cl. 137—68.)



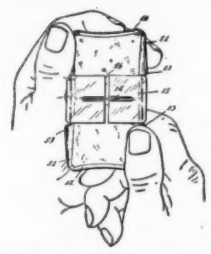
A tank adapted to collect moisture in the bottom thereof, a drain pipe in the bottom of the tank, a valve controlling said drain pipe, a float connected to the valve for operating the latter, said float being hollow, a hollow stem rising from the float, a tube extending downwardly in the tank forming a guide for the stem, said stem being spaced from the walls of the tube and open at its top to admit air from the tank into the float, and an adjustable stop in the tube for the stem to limit opening movement of the valve, said stop closing the upper end of the tube and being removable to open said end of the tube to the atmosphere.

2,417,994. VALVE. Herman E. Sheets, St. Paul, Minn., assignor to St. Paul Foundry Co., St. Paul, Minn., a corporation of Minnesota. Application Sept. 14, 1942, Serial No. 458,198. 3 Claims. (Cl. 137—139.)



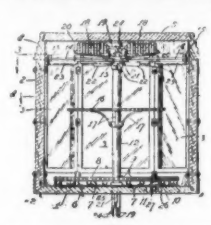
1. A valve comprising a valve body through which fluid may flow, a valve seat between the ends of said body, a valve member engageable against said seat and having one side only thereof exposed to the static and dynamic forces of said fluid flow, a pressure chamber to which the other side of said valve member is exposed for controlling the movement of said valve member, an ejector connected to said pressure chamber to control the pressure therein, a pilot valve on each side of said ejector, a by-pass around each said pilot valve, and a check valve in each said by-pass.

2,418,008. ICE-CUBE TRAY. Charles A. Bauer, Newburg, Ind., assignor to Hoosier Cardinal Corp., Evansville, Ind., a corporation of Indiana.



1. In combination, an ice-cube tray and a grid therefor, said tray being generally rectangular in shape and having integral bottom, side, and end walls, said side and end walls being curved horizontally to present convex faces inwardly of the tray, said side walls being provided adjacent their ends with upwardly and outwardly projecting ears, said grid comprising a top and one or more flexible vertical partitions integral therewith and extending transversely of the tray to divide the interior thereof into a plurality of compartments, said top resting on the upper edges of the side walls of the tray between the ears thereon, said ears serving to locate the grid longitudinally of the tray, said grid-top being divided longitudinally of the tray into two sections interconnected by said partition and capable of limited relative movement in the plane of the top, whereby the partitions may be flexed by the application to the top of opposed forces in the plane of the top and displaced from the partitions.

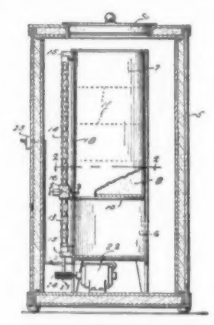
2,418,062. REFRIGERATED DISPLAY CABINET. William Abrahamson, Chicago.



1. In a display cabinet having transparent side walls, a support in the lower portion of the cabinet mounted for rotation about a vertical axis, a hollow axially disposed pillar rotatable with said support, extending upwardly therefrom in the cabinet and open at its upper and lower ends, a bearing for said pillar adjacent its upper end with arms extending from the cabinet structure bracing said bearing in position, refrigerating coils disposed in the upper portion of the cabinet with refrigerant circulating tubes entering said pillar at its lower end and emerging from the upper end thereof for connection with said coils, and drip pan means under said coils in out-of-contact relation to said pillar.

Week of April 1

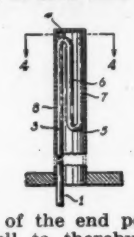
2,418,113.. ICE CREAM DISPENSING CABINET. Lawrence D. Fletcher, Lansing, Mich., assignor of one-half to William Nelson Calhoun, Lansing, Mich.



In an ice cream dispensing cabinet, the combination of a can container provided with supporting legs and having a vertical slot through one side thereof, said slot extending substantially from top to bottom of the container, a vertical rotary shaft journaled on the outside of said container at said slot, said shaft having right and left spiral grooves therein which communicate with each other at their opposite ends adjacent the ends of said slot, a vertically reciprocable follower plate within the container, an arm rigid with the follower plate and freely projecting outwardly through said slot, a sleeve slidable on said shaft and fixed to said arm, a pin carried by said sleeve and engaged in a groove of the shaft, and a uni-directional driving motor mounted beneath the container and geared to the lower end of said shaft.

2,418,150. THERMAL RESPONSIVE ELEMENT. John R. Adriansen, Cincinnati, Ohio, and Robert N. Eck, Whitefish Bay, Wis., assignors to Cutler-Hammer, Inc., Milwaukee, Wis.

A thermal responsive element having a closed fluid containing capillary tube extension for insertion within an associated cylindrical well, said tube extension having spaced oppositely disposed hairpin bends forming an end portion consisting of a short end leg and a short intermediate connecting leg between said end leg and the body of said tube, said legs being spaced with respect to each other and with respect to the body of said tube to provide for torsional stressing of said tube in the intermediate leg portion thereof and transverse stressing of said tube at said bends



upon insertion of the end portion thereof within said well to thereby insure good thermal contact.

(To Be Continued)

CLASSIFIED ADVERTISING

RATES for "Positions Wanted" $2.50 per insertion. Limit 50 words.

RATES for all other classifications $5.00 per insertion. Limit 50 words.

ADVERTISEMENTS set in usual classified style. Box addresses count as five words, other addresses by actual word count.

POSITIONS WANTED

AVAILABLE AT once for factory sales or field service, man with 12 years experience with service and sales, prefer Midwest, excellent references. BOX 2360. Air Conditioning & Refrigeration News.

REFRIGERATION DISTRIBUTORS — having attended refrigeration and air conditioning school for 17 months. Would be interested in training position with reliable company anywhere in United States or South America. BOX 2367, Air Conditioning & Refrigeration News.

GRADUATE REFRIGERATION engineer with eighteen years of executive experience in the design, development, testing, and servicing of commercial and domestic refrigeration equipment desires a position with a manufacturer, distributor or engineering firm in the Southwest or on the West coast. BOX 2370, Air Conditioning & Refrigeration News.

AIR CONDITIONING refrigeration service engineer desires permanent connections with some progressive firm. Can handle motor repairs as well as any electrical wiring layout. If desired could handle service department including electric shop, doing industrial and domestic wiring and appliance repair. BOX 2372, Air Conditioning & Refrigeration News.

POSITIONS AVAILABLE

SERVICEMEN WANTED: Opening available immediately for two experienced commercial and domestic refrigeration servicemen to service Frigidaire and other makes. Dry climate and pleasant working conditions. Kindly give experience and references in first letter. All replies confidential. Address J. M. HARPER, Service Manager, 3202 Pershing Drive, El Paso, Texas.

WANTED: EXPERIENCED service manager familiar with heating, air conditioning and commercial refrigeration operation for permanent position with large and well-established distributor. Must be capable of handling and training men. Good salary, fine future, excellent shop facilities and equipment, good working conditions. Reply, SIDLES CONDITIONED AIR COMPANY, Omaha, Nebraska.

EXPERIENCED COMMERCIAL refrigeration salesman to represent manufacturer of commercial refrigeration. Car essential. Exclusive territories. BOX 2351, Air Conditioning & Refrigeration News.

LARGE REFRIGERATION distributor has excellent opportunity for salesman with good commercial background. Salary and commission $10,000 to $15,000 per year. Fine engineering and service departments to assist sales. Must own car and live in Chicago. Write full details giving age, experience, references, etc. BOX 2358, Air Conditioning & Refrigeration News.

WANTED—ADVERTISING and sales promotion manager. Reputable manufacturer of farm milk coolers, farm freezers and commercial refrigeration equipment located in the East, has permanent position with good salary range. Write BOX 2362, Air Conditioning & Refrigeration News.

SERVICE MANAGER opening in Buffalo for experienced service manager for commercial refrigeration distributor to handle both retail and wholesale accounts. Splendid salary for qualified man. BOX 2371, Air Conditioning & Refrigeration News.

EQUIPMENT FOR SALE

MOTORS AND condensing units—available at once—⅛-¼-⅓-½ Universal condensing units with or without motors. Special—six hole ice-cream cabinets with ¼ hp. Copeland units less motors $225. Also beverage coolers, beer equipment, stainless steel reach-in freezers. ALBROD CORP., 319 West 48th St., New York City 19, CI 6-9100.

IMMEDIATE DELIVERY—new air conditioning equipment. Weathermakers complete with motor, "Freon" coil, etc. 2 ton to 25 ton. SWSI, DWDI, and twin centrifugal blowers, propeller fans, heating and cooling coils, evaporative condensers, self-contained air conditioning units, condensing units. CONTROLDTEMP CORP., 236 Butler St., Brooklyn 17, N. Y.

FOR SALE—AC motors ½ to 3 hp. single and 3 phase, list price. Immediate delivery. EDISON COOLING CORP., 310 E. 149th St., Bronx 51, N. Y.

QUALITY BOBTAIL fountains; reach-ins, walk-in boxes—wood, metal; dough retarders; double duty cases—stainless steel, porcelain; dairy, florist, bakery cases; ice cream hardening cabinets; thermopane frozen food cases; milk, sandwich coolers; stainless steel back bars; with machines. Equipment made to special order. FRIGITEMP CORP., 931 Bergen St., Brooklyn 16. MA 2-9093.

NEW AMMONIA compressors 3½ x 3½ to 6 x 6 V.S.A. and 5 x 7 to 10½ x 13 H.D.A. Immediately available at trade prices. Associated heat exchange equipment also available. GAY ENGINEERING CO., 2730 E. 11th St., Los Angeles 23, California.

1000 MOTORS, FOR sale, from stock ⅝ hp.—3425 RPM—3 ph/230 V. (Underrated—easily equal to ¾ hp.) Ballbearing, for vertical or horizontal. Enclosed Fr. ¾ in. shaft. $36 each. This rugged motor cannot burn out. (Glass insulated wire coils.) MODERN SUPPLY CO., 208 Fulton St., New York 7—CO 7-0100.

SECTIONAL WALK-IN coolers, kiln dried fir front, spruce interior. Chrome hardware, metal saddle, finished shellac 4 in. Fiber $1.20 for freezers 6 in. Fiber $1.40 per sq. ft. Cork insulation prices on request. Limited number new refrigeration units coils, etc. available. Send us your requirements. REFRIGERATION SPECIALTIES, INC., 721 Flushing Ave., Brooklyn 6, N. Y.

FLOAT REPLACEMENTS. For replacing defective high side floats on all household units. Regular charging connection, capillary tube setup, internal strainer and exact mounting plate. Part #2000-Westinghouse (4 hole plate), and #2010 (3 hole plate): Part #2020-Gibson Part #2030-General Electric (DR-1 & DR-2). Part #2040-For general replacement (undrilled plate). $6.75 each. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56.

SEALED CROSLEY TERMINALS. Installed from the outside in a few minutes without opening the compressor. Corrects leaky terminals on all Crosley "F-12" units. Set of three $6.75 (Part No. 1020). Installation tool $1.65. Immediate delivery. Money-back guarantee. SEALED UNIT PARTS CO., 3097 Third Ave., New York 56, N. Y.

COMPRESSOR EXCHANGE—Unit rebuilding. Over 300 compressors, immediate delivery (on receipt of your old compressor) on 90% of the compressors in the field. And—at half the price of a new one. Prices on request. Also parts & supplies. Wholesale only. SQUARE DEAL SUPPLY CO., 904 N. Illinois, Indianapolis, Indiana.

IMMEDIATE DELIVERY on 80 new ½ HP 1200 RPM Brown-Brockmeyer ball bearing drip proof motors 1/60/120/240. Westinghouse cooling units, 1200 D.C. 12" Robbins & Myers fans. Generators, switch panels, iron cords, plugs, Fearless dishwashing machines. TRIAD SUPPLY COMPANY, INC., 114 East 6th, Bloomington, Indiana.

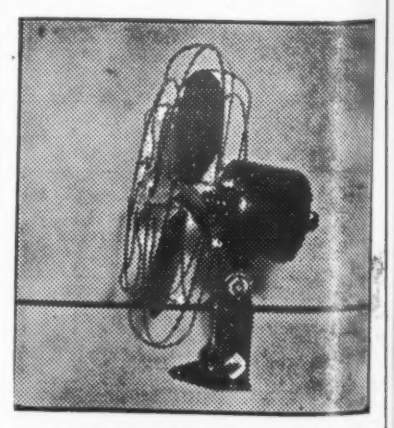
FOR SALE—Two 25 HP Brunner hi-temp water cooled "Freon" units complete with starter. Immediate delivery from the middle west point. Price $2000.00 net cash. BOX 2369, Air Conditioning & Refrigeration News.

FRANCHISES AVAILABLE

LOW COST automatic fire extinguisher. Exclusive county rights available for the Marvel automatic Kill-Fyr extinguisher. Component parts approved. Easy sales, good profits. Write for descriptive circular and facts from satisfied users. KILL-FYR MANUFACTURING CO., Dept. R-88, Camden, N. J.

BUSINESS OPPORTUNITIES

COMMERCIAL REFRIGERATION and frozen food distributing business. Established 8 years, 2 trucks, $30,000 stock, frozen food route doing $2,000 weekly, refrigeration sales gross $150,000 annually, 5 year lease, Main Street, Large Long Island village, exclusive territory, largest manufacturers. Price $40,000.00, terms. POTTER & ROBINSONS, INC., Broker, Patchogue, N. Y.


ELECTRIC FANS
New 12" Robbins & Myers Model 1351-B—115 volt D.C. Stationary 4-blade.
Immediate Delivery.
1200 in stock—prewar discounts.
Wire or phone for details.
TRIAD SUPPLY COMPANY
114 East 6th St.
— 6309 —
Bloomington Indiana

Take New Places In McCray Co. District Sales Manager Shifts

C. H. ZIEBELL — H. W. ZIEBELL — R. E. ABBOTT — C. E. MURPHY

Engineers Inspect New Airtemp Laboratory

DAYTON—More than 85 members of the American Society of Refrigerating Engineers who were attending the recent meeting here of the Cincinnati section, made an inspection trip through the new Chrysler research laboratory, and the new factory of the Airtemp Division of Chrysler Corp.

Guides from the engineering department conducted them in groups through the cooling laboratory. They were shown latest methods of testing compressors on electric and gas cycle calorimeters, apparatus for determining film coefficients, room cooler testing equipment, and recurrent wind tunnels used for testing fans and coils.

In the heating laboratory they saw the newest methods for testing gas, oil, and stoker fired equipment.

Air Devices, Inc. Names Two Representatives

NEW YORK CITY—Air Devices, Inc., here is now represented in the Little Rock, Ark., area by Mullins Engineering Co. and in the Muskegon, Mich., area by Harold R. Young as the result of appointments recently announced by George J. Sweeney, vice president.

Mullins' headquarters will be located in the Wallace building, Little Rock, and Mr. Young's at 1364 Lake Shore Rd., Muskegon. They will represent Air Devices' complete line of Agitair air filters, air diffusers, exhausters, and industrial furnaces.

McCray Makes Changes In Advertising and Field Sales Setup

KENDALLVILLE, Ind.—Advertising manager and five district sales managerships were among the key posts filled by the McCray Refrigerator Co. in a recent series of promotions.

W. L. Herald, former assistant advertising manager, has been placed in charge of the department and his former post filled by William H. Green.

Regarding the district sales posts the following changes were made:

Clarence H. Ziebell has been promoted from assistant sales manager to district sales manager of the Atlanta office. The position he is vacating will be taken over by Robert E. Abbott, a graduate refrigeration engineer who has been with McCray's sales engineering department for some time.

Harry W. Ziebell leaves the post of advertising manager to take charge of the Kendallville and Columbus, Ohio, sales district.

H. E. Culbertson, former branch manager, has been made district manager of the New York and Boston areas.

Charles E. Murphy has been shifted from the assistant managership of the Chicago branch to head of the Chicago and St. Louis sales districts.

K. E. Tobin, formerly heading up the Washington office, assumes responsibility for the Washington and Pittsburgh areas as district sales manager.

Newly defined boundaries have been established in the Dallas, Denver, and San Francisco territories for District Sales Manager T. J. Murphy. Assisting him in the Denver district henceforth will be R. K. Pepple, who formerly managed McCray branches in Dallas, Tex. and Memphis, Tenn.

All those named in the promotions will report to R. J. Rehwinkel, vice president in charge of sales.

Make Tempco Catalog To Customers' Wishes

CHICAGO — Full-page product illustrations, technical drawings, and engineering data feature the 140-page, first-edition catalog of refrigeration parts and equipment now being offered qualified buyers by Tempco Supply Co., here.

F. A. Rittle, Tempco president, said these features were included at the suggestion of customers who told the wholesale supply house, in effect:

"Give us a catalog which is not just a hodge-podge listing of what you have to sell, but one that gives us sufficient engineering data on parts and equipment, that has logical sequence of product listings, and one that is easy to read."

Locker Plant High Bidder for Buffaloes

OMAHA, Neb.—Martin C. Hansen, proprietor of the Frozen Food Locker Co., here was high bidder at the Omaha stockyards on three buffaloes shipped in from a ranch in western Nebraska.

He paid $19.50 per hundred pounds for the animals which weighed approximately 1,023 pounds each, and will sell them to his locker plant patrons in the form of steaks, roasts, etc.

Nelson Chief Engineer For Thermodyne Corp.

NEW YORK CITY—The Thermodyne Corp., distributor for Carrier air conditioning and refrigeration equipment in New York City, has announced today that Chester L. Nelson is joining its staff as chief engineer.

Mr. Nelson has been vice president of Air Conditioning Engineers, Inc., Mobile, Ala., and has had a long career in the industry.

Following his graduation from the University of Minnesota in 1929, he worked for Carrier for several years and was loaned to the Metropolitan Life Insurance Co., to assist in the training of personnel and the development of proper operating and maintenance schedules for the large Carrier air conditioning plant installed in Metropolitan's home office building in New York in 1932. Later he served as chief engineer for Sears & Piou, Carrier distributor for St. Louis, and for Air Conditioning Engineers, Inc.

Spencer Heads Sales For John W. Walter, Inc.

LONG ISLAND CITY, N. Y.—Ray Spencer, formerly manager of the radio and television division, has been promoted to general sales manager for John W. Walter, Inc. here, exclusive distributor in the greater New York area for Presteline ranges and refrigerators, Stewart-Warner radio and television, automatic Duo-Disc washers, etc.

for SULFUR DIOXIDE and METHYL CHLORIDE

See Your ANSUL WHOLESALER

These Ansul Refrigerants have a long record for DRYNESS, PURITY and DEPENDABILITY. You will like Ansul's friendly service.

*REG. U.S. PAT. OFF.

ANSUL CHEMICAL COMPANY
REFRIGERATION DIVISION
MARINETTE, WISCONSIN
Distributors for Kinetic's "Freon-11," "Freon-12," "Freon-21," "Freon-22" and "Freon-113"

HEAT TRANSFER EQUIPMENT
MARLO COIL COMPANY
SAINT LOUIS, MISSOURI

A MASTERPIECE in Thirst-quenching Convenience

OASIS ELECTRIC WATER COOLERS

You're always *Sure* with an Oasis-built by Ebco, pioneers in the electric water cooler field.

The EBCO Mfg. Co.
401 W. Town St.
Columbus 8, Ohio

SPECIFY... DRYERS THAT BEAR THIS LABEL — CHARGED DAVISON'S IN SILICA GEL OUT WITH

—the label that is your guarantee of maximum performance and satisfaction. Your jobber stocks it—for refilling and in factory charged dryers.

STEEL WORK BENCHES
IDEAL FOR ALL TYPES OF WORK

SIZE 28" x 72"
MADE BY
LYON METAL MFG. Co.
SEND FOR SHOP CATALOG

$26.35

CHASE REFRIGERATION SUPPLY COMPANY
546-48 West 119th St., Chicago 28, Illinois

You Get More Refrigerator VALUE in GENERAL

TOP QUALITY...LOW PRICES

You get many important added features in General Refrigerators...Yet currently Generals are *priced so low* that THERE IS NO BETTER VALUE IN THE MARKET.

STAINLESS STEEL REACH-IN REFRIGERATOR
16-21-30-42 Cu. Ft.

Stainless Steel Reach-in-Refrigerators
Farm and Home Freezers
Frosted Food Cases
Island Display Cases
Dairy Wall Cases
Meat and Dairy Display Cases
Beverage Coolers
Ice Cream Cabinets

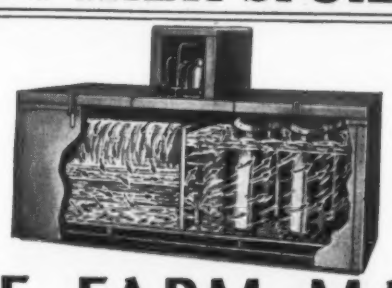
For full information write Department A 21.
Manufactured by

GRC GENERAL REFRIGERATORS CORP.
678 BROADWAY NEW YORK 12, N.Y.

WILSON SELF-CONTAINED AUTOMATIC HIGH WATER LEVEL ZERO-FLOW

STOPS MILK SPOILAGE

COOLS THE DANGER ZONE FAST



Wilson ZERO-FLOW MODEL ZF8 HX50

Packaged-Unit Milk Cooler
Sizes from 4- to 24-can capacity

TO CAPTURE AND HOLD THE FARM MARKET

Specify Genuine "Refrigeration by Wilson"

• FARM MILK COOLERS • FARM FREEZERS • FARM REACH-IN REFRIGERATORS • FARM WALK-IN REFRIGERATORS

For Franchise Information, Address Dept. 11 WILSON REFRIGERATION, INC., Smyrna, Delaware

How Money Was Spent on Magazine Advertising Of Household Electric Refrigerators In 1946

Admiral

Admiral Corp., Chicago, Ill.

American	$ 13,056
McCall's	13,305
Woman's Home Companion	14,250
Parents	7,450
House Beautiful	4,000
True Story	11,700
Good Housekeeping	19,600
Collier's	20,600
Total	**$103,961**

Coolerator

Coolerator Co., Duluth, Minn.

American Home	$ 8,500
Better Homes & Gardens	9,950
Parents	1,015
Household	5,400
Holland	850
Woman's Day	8,915
American Weekly	4,650
Saturday Evening Post	9,575
Time	1,185
Total	**$ 50,040**

Crosley

Crosley Corp., Cincinnati, Ohio

Woman's Day	$ 8,000
Parents	3,400
Household	9,000
Better Homes & Gardens	14,650
Good Housekeeping	8,800
American	7,000
Ladies' Home Journal	20,250
Saturday Evening Post	19,100
Liberty	3,500
Collier's	15,500
Total	**$109,200**

Frigidaire

Frigidaire Div. of General Motors Corp., Dayton, Ohio

Holland	$ 5,500
Ladies' Home Journal	15,225
McCall's	8,200
Household	9,000
Good Housekeeping	15,100
Better Homes & Gardens	18,250
American Home	14,840
Collier's	17,000
Saturday Evening Post	12,800
Life	17,910
Total	**$133,825**

Frostair

Frostair Div., General Tire & Rubber Co., Chicago, Ill.

Saturday Evening Post	$ 7,705
Total	**$ 7,705**

General Electric

General Electric Co., Bridgeport, Conn.

Household	$ 16,200
Ladies' Home Journal	67,025
True Story	6,500
McCall's	10,700
Saturday Evening Post	63,200
Total	**$163,625**

Gibson

Gibson Refrigerator Co., Greenville, Mich.

Ladies' Home Journal	$ 41,125
Good Housekeeping	26,400
Liberty	17,010
Saturday Evening Post	51,900
Total	**$136,435**

Hotpoint

Hotpoint Inc. Chicago, Ill.

McCall's	$ 38,470
Life	96,690
American Weekly	33,000
Total	**$168,160**

Kelvinator

Nash-Kelvinator Corp., Detroit, Mich.

Household	$ 32,400
American Home	26,412
Better Homes & Gardens	27,850
Good Housekeeping	26,400
McCall's	21,400
Saturday Evening Post	117,300
Collier's	30,000
Life	106,040
Look	45,222
Total	**$433,024**

Norge

Norge Div., Borg-Warner Corp. Detroit, Mich.

Holland	$ 5,500
Ladies' Home Journal	12,950
Better Homes & Gardens	20,150
Sunset	2,600
Good Housekeeping	8,800
American Home	8,520
McCall's	10,700
Saturday Evening Post	27,100
Collier's	10,000
Total	**$106,320**

Perfecold

Perfecold, Inc., Los Angeles, Calif.

Sunset	$ 1,300
Total	**$ 1,300**

Philco

Philco Corp., Philadelphia, Pa.

Ladies' Home Journal	$ 58,230
Woman's Home Companion	27,360
Good Housekeeping	13,230
Saturday Evening Post	8,500
Collier's	7,000
Life	14,375
Forbes	825
Total	**$129,520**

Westinghouse

Westinghouse Electric Corp., Mansfield, Ohio

Saturday Evening Post	$ 12,000
Life	35,110
Total	**$ 47,110**

Ranking by Companies On Magazine Spending

Refrigerators

Nash-Kelvinator Corp.	$433,024
Hotpoint Inc.	168,160
General Electric Co.	163,625
Gibson Refrigerator Co.	136,435
Frigidaire Div. of General Motors	133,825
Philco Corp.	129,520
Crosley Corp.	109,200
Norge Div., Borg-Warner Corp.	106,320
Admiral Corp.	103,961
Coolerator Co.	50,040
Westinghouse Electric Corp.	47,110
Frostair Div., General Tire & Rubber Co.	7,705
Perfecold, Inc.	1,300

'Dependabook' Includes Revised Motor Section

CHICAGO — Latest price changes and complete revision of the electric motor section are included in the summer catalog just issued by the Harry Alter Co., parts wholesaler here, J. R. Novotny, advertising manager, has announced.

Known as Harry Alter's Dependabook No. 144, the catalog is said to contain many new items. The cover is decorated with a four color picture of Mt. St. Helena.

New Unit Standards--

(Concluded from Page 1, Column 3)

recommendation on the reconciling of technical viewpoints of the small condensing unit standard," Mr. Powell was informed by W. E. Landmesser of ACRMA.

Mr. Landmesser is chairman of the association's small compressor and condensing unit section, and advised that results of this engineering committee's work should be available within 90 days, and thus had asked for the postponement.

Kelvinator's New Television Show Begins

First regular television advertiser in the home appliance field is Kelvinator. The firm's NBC video show "In the Kelvinator Kitchen" got under way May 7. Shown with the star, Alma Kitchell, in the New York studio are the following officials: (Left to right) H. W. Newell, vice president of Geyer, Newell & Ganger, Inc. (Kelvinator advertising agency); Charles J. Coward, Kelvinator director of advertising and sales promotion; and Keith Saunders, New York zone manager of Kelvinator.

Parker Rust Proof Co. Readies 'Bonderizing' Catalog

DETROIT — A new catalog on "Bonderizing," the treatment for metals which preserves finishes by anchoring the paint, and retarding corrosion, is now ready for distribution, Parker Rust Proof Co. here announces.

The new catalog contains much new information on the Bonderizing process and its applications on steel, aluminum, zinc, and their alloys, on die castings, and on Bonderite as an aid in deep drawing of steel and aluminum.

Many dealers are changing to

NATIONAL DRY BEVERAGE COOLERS

at their customer's request through their friend's recommendation.

And now the new portable model, some complete with compressors. The compressor section at right end is detachable for remote use and can be purchased separately. Note the all stainless steel top, the graceful lines, and what sturdiness!

4 Popular Sizes: 15, 23, 31 & 39 Cases

NATIONAL COOLER CORP.
1600 Woodland Ave., Cleveland 15, Ohio
Complete line Stainless Steel Restaurant Equipment

3 GOOD REASONS

WHY YOU'LL LIKE

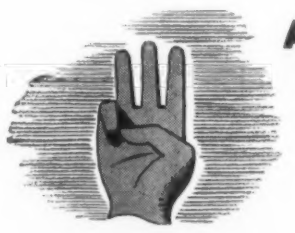
ALCOA "3S-O" ALUMINUM TUBING

LOW COST PER FOOT . . .

compare it with other material.

EASY TO BEND . . .

you can make bends and coils in aluminum tubing faster and easier than in other metals. Standard bending jigs do the job.



AVAILABLE NOW . . .

you can get Alcoa Aluminum Tubing *NOW* in all standard diameters and wall thicknesses from your nearby Alcoa distributor or by writing to ALUMINUM COMPANY OF AMERICA, 1975 Gulf Building, Pittsburgh 19, Pennsylvania. Sales offices in leading cities.

MORE people want MORE aluminum for MORE uses than ever

ALCOA FIRST IN ALUMINUM

IN EVERY COMMERCIAL FORM